Maths summer Revision

Groups 1+2

Name: _____Answers.____

Multiplication Practice – 2 Digits x 2 Digits **Answers**

1.
```
            3   6
 x          3   2
            7   2
     1  0   8¹  0
     1  1¹  5   2
          1
```

2.
```
            4   6
 x          3   3
        1   3   8
     1  3   8¹  0
     1  5¹  1   8
           1
```

3.
```
            1   6
 x          3   3
            4   8
        4   8¹  0
        5¹  2   8
          1
```

4.
```
            1   4
 x          2   3
            4   2
        2   8¹  0
        3   2   2
          1
```

5.
```
            2   5
 x          3   6
        1   5   0
        7   5³  0
        9¹  0   0
          1
```

6.
```
            3   5
 x          5   6
        2   1   0
     1  7   5³  0
     1¹ 9²  6   0
```

7.
```
            3   4
 x          2   3
        1   0   2
        6   8¹  0
        7   8   2
```

8.
```
            4   3
 x          3   3
        1   2   9
     1  2   9   0
     1  4   1   9
          1
```

9.
```
            4   2
 x          2   5
        2   1   0
        8   4¹  0
     1  0   5   0
          1
```

10.
```
            4   6
 x          1   6
        2   7   6
     4² 6³  0
     7³ 3   6
          1
```

11.
```
            5   2
 x          2   6
        3   1   2
     1  0   4¹  0
     1  3   5   2
```

12.
```
            3   2
 x          5   2
            6   4
     1  6   0   0
     1  6¹  6   4
```

Long Multiplication Practice - 3 Digits x 2 Digits **Answers**

1.

		1	6	1
x			2	3
		4	8	3
	3	2	2	0
	3	7	0	3

2.

		2	3	2
x			2	6
	1	3	9	2
	4	6	4	0
	6	0	3	2

3.

		6	1	4
x			1	8
	4	9	1	2
	6	1	4	0
1	1	0	5	2

4.

		9	6	9
x			9	5
	4	8	4	5
8	7	2	1	0
9	2	0	5	5

5.

		7	4	0
x			9	6
	4	4	4	0
6	6	6	0	0
7	1	0	4	0

6.

		3	6	2
x			5	8
	2	8	9	6
1	8	1	0	0
2	0	9	9	6

7.

		3	0	5
x			7	1
		3	0	5
2	1	3	5	0
2	1	6	5	5

8.

		3	7	0
x			6	4
	1	4	8	0
2	2	2	0	0
2	3	6	8	0

9.

		5	8	4
x			1	5
	2	9	2	0
	5	8	4	0
	8	7	6	0

10.

		8	5	1
x			8	9
	7	6	5	9
6	8	0	8	0
7	5	7	3	9

11.

		7	4	9
x			9	8
	5	9	9	2
6	7	4	1	0
7	3	4	0	2

12.

		4	8	2
x			2	3
	1	4	4	6
	9	6	4	0
1	1	0	8	6

13.

		6	4	6
x			1	0
				0
	6	4	6	0
	6	4	6	0

14.
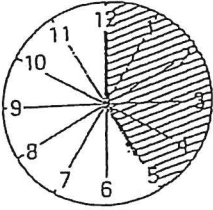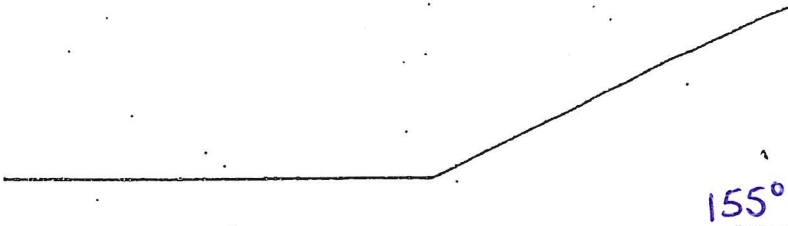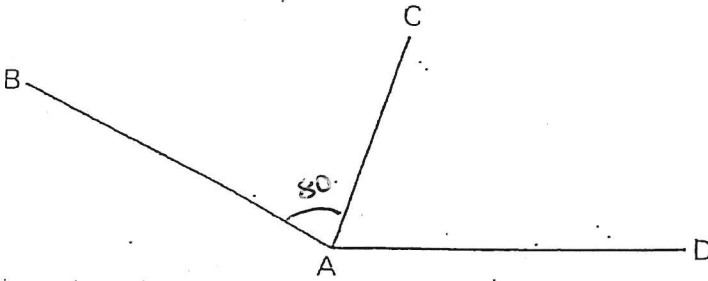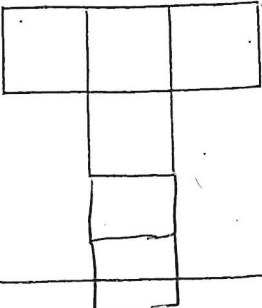
		7	0	9
x			1	7
	4	9	6	3
	7	0	9	0
1	2	0	5	3

15.

		9	1	4
x			5	7
	6	3	9	8
4	5	7	0	0
5	2	0	9	8

16.

		7	1	8
x			4	5
	3	5	9	0
2	8	7	2	0
3	2	3	1	0

1 Complete the equation. $\frac{1}{3} = \frac{3}{6}$	**2** Write > or < in the ◯. (a) $\frac{1}{4}$ ⊘ $\frac{1}{6}$ (b) $\frac{2}{3}$ ⊘ $\frac{1}{2}$	**3** (a) $246 - (9 \times 8) =$ 174 (b) $165 \div (8 - 3) =$ 33

4 Calculate the angle (shaded) between the hands of the clock.

150°

5 Measure this angle.

155°

6

Angle BAC = 80°
Angle BAD = 150°
Calculate angle CAD.

Angle CAD = 70°

7 A ship is sailing on a bearing of 070°.
It then turns through an angle of 116°
in a clockwise direction.
On what bearing is it now sailing?

186°

8 What is the average of 16, 28 and 31?

75 ÷ 3

25

9 Find the total cost of 4 bulbs at 28p each,
and 7 plants at 32p each.

£3·36

112
+ 224

10 Betty had £10. She bought a book for 80p
and two pens costing 18p each.

(a) How much did she spend? £8·36

(b) How much was left? £1·64

11 Calculate the area of a
rectangle with length 22 cm
and breadth 9 cm.

198 cm²

12 Add two squares
to make the net
of a closed cube.

Lots of
answers

1. Complete the equation. $\frac{1}{4} = \frac{3}{12}$	**2** Write > or < in the O. (a) $\frac{1}{5}$ Ⓒ $\frac{1}{4}$ (b) $\frac{3}{4}$ Ⓓ $\frac{2}{3}$	**3** (a) $(7 \times 6) - (4 - 3) =$ <u>41</u> ⁴² (b) $(180 \overset{88}{-} 92) \div 4 =$ <u>22</u>

4 Calculate the angle (shaded) between the hands of the clock.
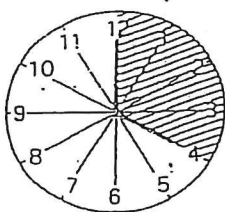
<u>120°</u>

5 Measure this angle.
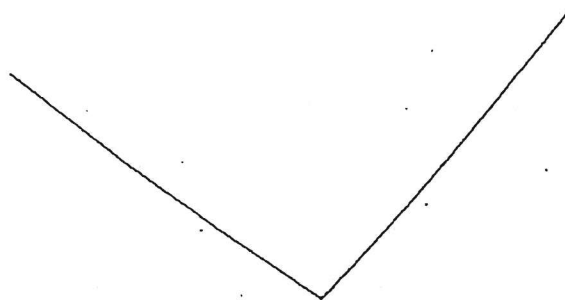
<u>96°</u>

6
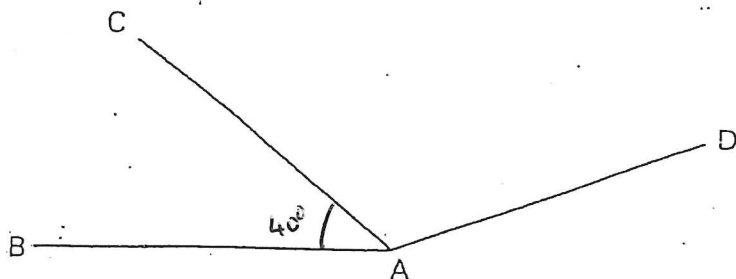
Angle BAC = 40°
Angle BAD = 160°
Calculate angle CAD.

Angle CAD = <u>120°</u>

7 An aeroplane is flying on a bearing of 250°. It then turns through 75° in a clockwise direction.
On what bearing is it now flying? <u>325</u>

8 What is the average of 9, 25 and 38?

$72 \div 3$

<u>24</u>

9 Find the total cost of 8 loaves at 29p each and 9 cakes at 17p each.

232
153

<u>£3·85</u>

10 John had £8. He bought a birthday card for 23p, and three postcards costing 15p each.

(a) How much did he spend? <u>£0·68</u>

(b) How much was left? <u>£7·32</u>

11 Calculate the area of a rectangle with length 24 cm and breadth 7 cm.

<u>168cm²</u>

**12** Add two rectangles to make the net of an open cuboid.

1
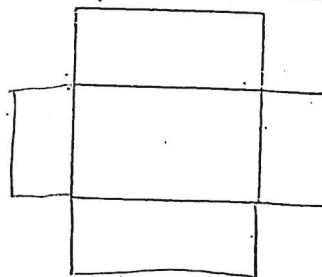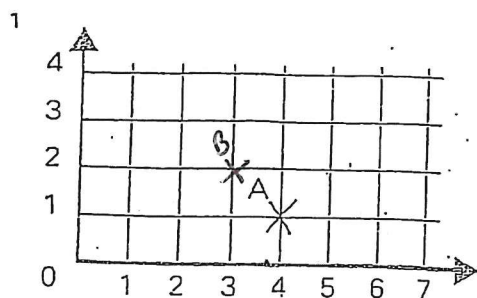
(a) What is the number pair for A?

$(4,1)$

(b) Mark a point B that has the number pair (3, 2).
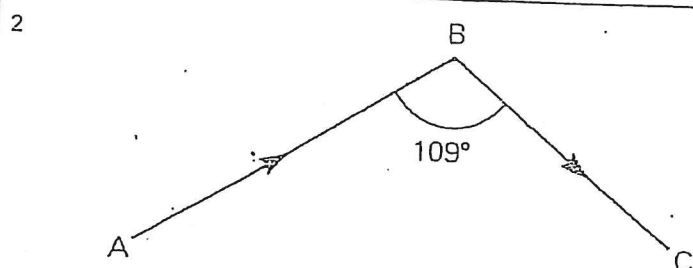
2

109°

You are walking along AB, and get to B. What angle must you turn through, to face in the direction of C?

$71°$

3 Write this number.

5 in the units place
1 in the hundredths place
8 in the tens place
6 in the tenths place

5186

4 Complete these patterns.

(a)

(b) 2 2 3 3 3 4 4 4 4 5 5 5 5 _5_ _6_

5
```
   3.68
 +2.79
  6·47
```

6
```
   92.1
 −46.5
  45·6
```

7
```
   6.53
 −1.72
  4·81
```

8 $34.7 \div 17 =$ _51·7_

9 $1.3 \div 4.96 =$ _6·26_

10 $40.6 - 18 =$ _22·6_

11 $14.9 - 6.74 =$ _8·16_

12 Round 7.46 to:

(a) one place of decimals

_7·5_

(b) the nearest whole number

_7_

13 Give the values at A and B as decimals.

A _6·7_   B _7·3_

1
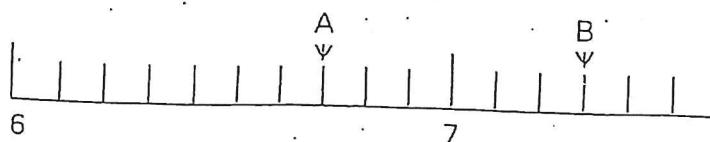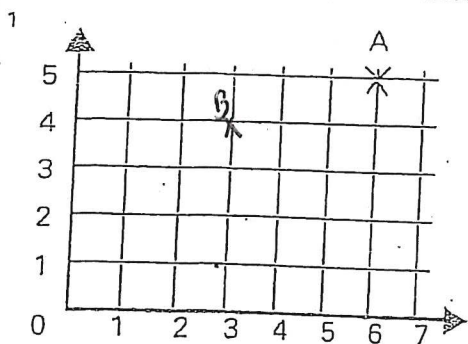
(a) What is the number pair for A?

$(6,5)$

(b) Mark a point B that has the number pair (3,4).
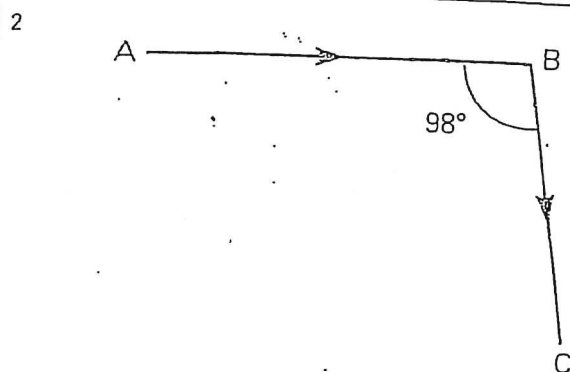
2

You are walking along AB, and get to B. What angle must you turn through, to face in the direction of C?
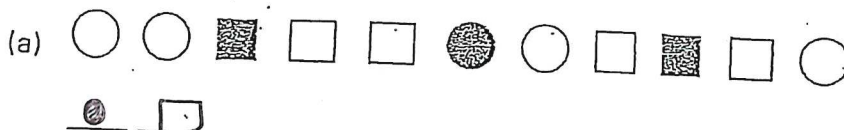
$82°$

3

Write this number.

2 in the tenths place
5 in the units place
1 in the tens place
7 in the hundredths place

2517

4

Complete these patterns.

(a)

(b) 1 1 1 1 1 2 2 2 2 3 3 _3_ _2_

5

$$5.43 \\ +1.68 \over 7.11$$

6

$$81.4 \\ -32.6 \over 48.8$$

7

$$9.68 \\ -3.84 \over 5.84$$

8 $26.9 \div 15 =$ _41.9_

9 $7.4 \div 2.89 =$ _10.29_

10 $62.7 - 29 =$ _33.7_

11 $8 - 3.16 =$ _4.84_

12

Round 8.87 to:

(a) one place of decimals

_8.9_;

(b) the nearest whole number

_9_.

13

Give the values at A and B as decimals.
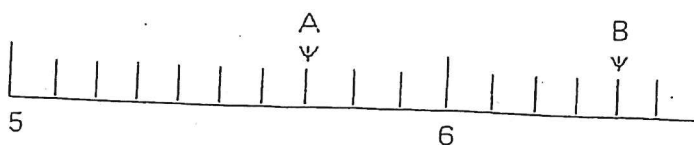
A _5.7_   B _6.4_

1

3 m 84 cm = _384_ cm.

2 Calculate the volume of a cuboid measuring 2 cm high, 4 cm wide, 5 cm long.

$40cm^3$

3

3 and 6 are the first two multiples of 3.
Write the next four multiples of 3.

_9_   _12_   _15_   _18_

4

Write any multiple of 5 which is also a multiple of 4.

20,40

5

$$\begin{array}{r} 487 \\ \times\ 10 \\ \hline 4870 \end{array}$$

6

$$\begin{array}{r} 782 \\ \times 100 \\ \hline 78200 \end{array}$$

7 Use your calculator.
Find the cost of 67 cameras,
at £49 each.

£3283

8 How many days from April 26th to May 7th?
(Don't count *both* the given days.)

4 + 6

_10_

9

(a) $7\overline{\smash{)}81}$ 11 r 4

(b) $6\overline{\smash{)}147}$ 24 r 3

10 Chris scored these marks in a test:
47, 68, 71.
What was her average score?

_62_

11 Find the total cost of 3 kg of potatoes at
39p for a kg and 9kg of carrots at 42p for a kg.

117
378

£4.95

12 You can use these numbers: 6, 5 and 4 (in that order), and any mathematics signs you like,
to make a number.

For example 65 − 4 = 61 or 6 × (5 − 4) = 6.

Make four other numbers.

_____

_____

_____

_____

1 2 m 71 cm = ___271___ cm.	**2** Calculate the volume of a cuboid measuring 2 cm high, 3 cm wide, 10 cm long. _60 cm^3_

3 7 and 14 are the first two multiples of 7.
Write the next four multiples of 7.

___21___   ___28___   ___35___   ___42___

4 Write any multiple of 6 which is also a multiple of 4.

12 , 24 , 36

5 539 × 10 _____ 5390	**6** 617 ×100 _____ 61700	**7** Use your calculator. Find how many chairs there are if there are 27 rows, and 38 chairs in each row. ___1026___

8 How many days from July 23rd to August 6th? (Don't count *both* the given days.) 8 rS ___13___	**9** (a) $9\overline{)87}$ 9r6 (b) $8\overline{)341}$ 42r5

10 Gemma saved these amounts in three weeks: 68p, 78p, 97p. What average amount did she save each week? ___81p___	**11** Find the total cost of 4 kg of beans at 45p for a kg and 8 kg of apples at 48p for a kg. 180 384 £5·64

12 You can use these numbers: 8, 9 and 1 (in that order), and any mathematics signs you like, to make a number.

For example 8 × (9 ÷ 1) = 80 or 8 ÷ (9 × 1) = 17.

Make four other numbers.

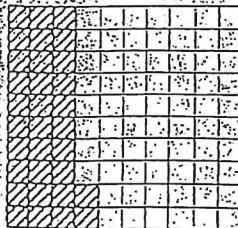_____   _____

_____   _____

Name

---

1 What part of the large square is shaded?

Give your answer as

(a) a fraction in lowest terms $\frac{8}{25}$

(b) a percentage 32%

2 Write $\frac{3}{25}$ as a percentage. 12%

3 The price of a dress was £30.
10% discount was given.
How much was paid for the dress?

£27

4 A water tank holds 84 litres when full.
It has 9.3 litres in it.
How much more water is needed to fill the tank? $74.7 L$

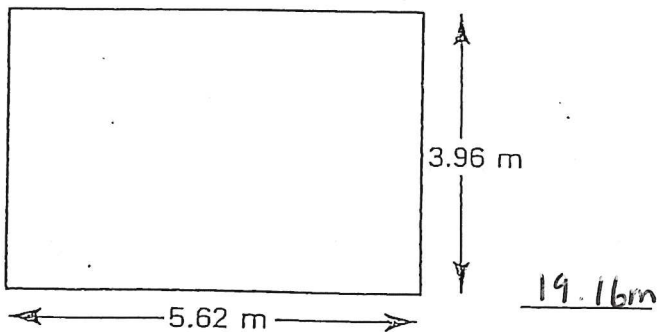**5** A number is halved. Then 2 is added.
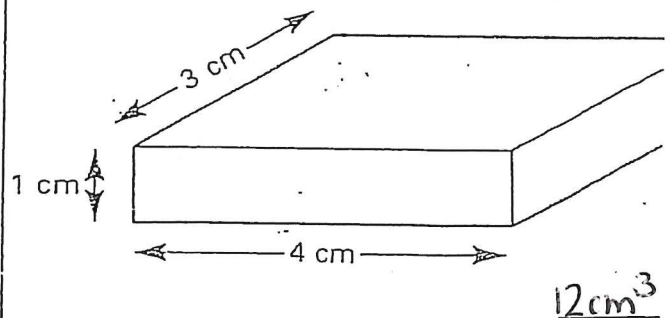The answer is 8.

What is the first number? 12

6
```
  14 m 68 cm
+ 27 m 49 cm
```
$42 m 17 cm$

7
```
  4.36 km
- 1.79 km
```
$2.57 km$

8 Find the perimeter of this rectangle.

3.96 m

5.62 m

$19.16 m$

9 Find the volume of this cuboid.

3 cm

1 cm

4 cm

$12 cm^3$

10 Change 2 l 46 ml to millilitres. $2046 ml$

11 Change 1.78 kg to grams. $1780 g$

12 What number is 10 000 more than 627 813? $637,813$
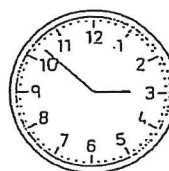
13 $200\,000 + 7000 + 80 + 6 = 207,086$

14 Round 16 846 to:

(a) the nearest 10 $16,850$

(b) the nearest 100 $16,800$

(c) the nearest 1000 $17,000$
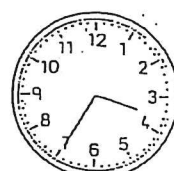
15 Write 4:25 p.m. as a 24-hour clock time. $16:25$

16 Change 6 hours and 29 minutes to minutes. 389

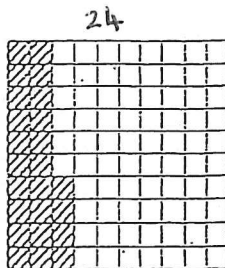**17**

A $2.52 \rightarrow$ B 3.35

How many minutes from the time showing on clock A to the time shown on clock B?

$43 mins$

1 What part of the large square is shaded?

24

Give your answer as:

(a) a fraction in lowest terms $\frac{6}{25}$

(b) a percentage 24%

2 Write $\frac{7}{20}$ as a percentage. _35%_

3 A pair of shoes cost £20.
10% discount was given.
How much was paid for the shoes?

£18

4 A roll of carpet measures 28 metres.
A customer buys 8.7 metres.
How much carpet is left? _19.3_

5 Three is added to a number.
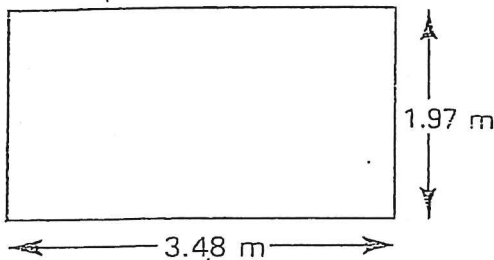The resulting number is halved.
This gives 6.
What is the first number? _9_

6
```
  26 m 68 cm
+ 35 m 33 cm
```
_62m 1cm_

7
```
  5.14 km
- 2.57 km
```
_2.57km_

8 Find the perimeter of this rectangle.

1.97 m

3.48 m

_10.9m_

9 Find the volume of this cuboid.

2 cm

2 cm

5 cm

20cm³
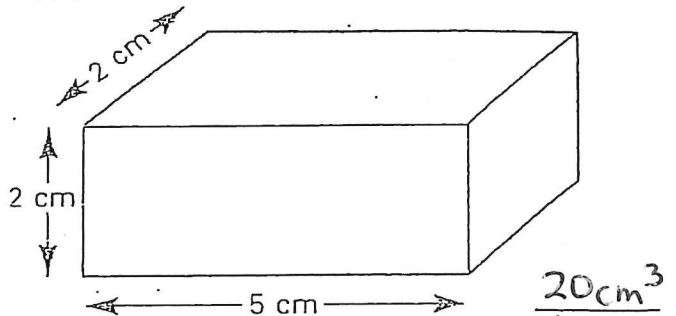
10 Change 3 l 62 ml to millilitres. _3062mL_

11 Change 3.16 kg to grams. _3160g_

12 What number is 10 000 more than 805 192? _815,192_

13 300 000 + 40 000 + 900 + 8 = _340,908_

14 Round 34 937 to:

(a) the nearest 10 _34,940_

(b) the nearest 100 _34,900_

(c) the nearest 1000 _35,000_

15 Write 6:35 p.m. as a 24-hour clock time. _18:35_

16 Change 4 hours 32 minutes to minutes. _272_

17 How many minutes from the time shown on clock A to the time shown on clock B?
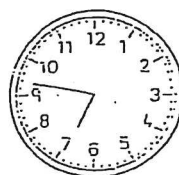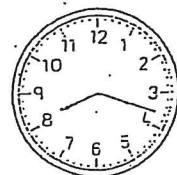
A   B
6 47   8 18

_91_

A

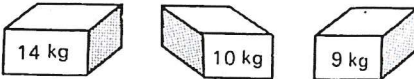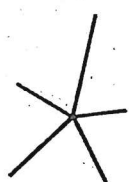|		ANSWER
1	$8 + 7000 + \quad = 7808$	800
2	£6·00 − £1·95 = £	£4·05
3	46 × 6	276
4	$7 \overline{)749}$ Find the value of x.	107
5	85p + p = £1·15	30 p
6	5 kg 60 g = g	5060 g
7	7 cm − 1.5 cm = mm	55 mm
8	£9·00 ÷ 100 = p	9 p
9	2.75 m = m cm	2 m 75 cm
10	$\frac{4}{5}$ of 35 kg	28 kg
11	200 min = h min	3 h 20 min
12	$\frac{1}{4}$ kg + 130 g + g = $\frac{1}{2}$ kg	120 g

B

		ANSWER
1	Divide the sum of 53 and 65 by 2.	59
2	The change from £2·00 was 43p. How much had been spent?	£1·57
3	Find the product of 8 and 8.	64
4	10 gift cards cost £1·20. Find the cost of 1 card.	12 p
5	Write the next two numbers of this series. 0.2 0.4 0.6 0.8	1·0, 1·2
6	From 360° subtract the sum of two right angles.	180 °
7	How many km and m are equal to 1560 m?	1 km 560 m
8	Write $9\frac{3}{8}$ to the nearest whole number.	9
9	Change to 12-hour clock times. Use a.m. or p.m. (a) 15.45	(a) 3·45pm
	(b) 00.15	(b) 12·15am
10	How many whole ones are equal to 36 quarters?	9
11	How many tens have the same value as 5010?	501
12	The sum of two numbers is 17. The difference between them is 1. What are the two numbers?	8 9

C

		ANSWER
1	Find the change from £5 after spending £1·33 and £2·57.	£1·10
2	A car travelled 240 km in 3 hours. What was the average speed in km/h?	80 km/h
3	14 kg 10 kg 9 kg Find the average mass of the three boxes.	11 kg
4	Grapes cost £3·20 per kg. What is the cost of 2 kg 500 g?	£ 8
5	By counting the small squares find the two shapes which are equal in area. Name the two shapes.	rectangle triangle
6	John had 150 stamps. He put 15 stamps on each of 8 pages in his album. How many stamps had he left?	30
7	This clock is 15 minutes fast. Write the correct time in figures using a.m. or p.m. morning	9:53am
8	A pack of 4 tins of ham can be bought for £5·12. Find the cost of 1 tin.	£1·28
9	At a football match there were 12 498 spectators. Write the number of spectators (a) to the nearest hundred (b) to the nearest thousand.	(a) 12,500 (b) 12,000
10	These angles are equal. (a) How many right angles are equal to the sum of the five angles? (a) 4 (b) How many degrees are there in each of the five angles? (b) 72 °	
11	Share 80p between Ali and Katie so that Ali has 20p more than Katie.	Ali 50 p Katie 30 p
12	There were 2.5 ℓ of milk for 4 children. 100 mℓ were spilt and the remainder was divided equally. What was one share?	600 mℓ

A

		ANSWER
1	2.9 = tenths	__29__ tenths
2	£4·07 = p	__407__ p
3	3 h 50 min = min	__230__ min
4	24p × 5 = £	__£1·20__
5	7 × = 43 − 8	__5__
6	76p + 5 FIVES = £	__£1·01__
7	(1000 × 10) + (100 × 5) + (10 × 7)	__10,570__
8	5.08 m = cm	__508__ cm
9	Find $\frac{1}{2}$ of $3\frac{1}{2}$.	__$1\frac{3}{4}$__
10	0.6 kg − g = 340 g	__260__ g
11	$3\frac{3}{4}\ell =$ ℓ mℓ	__3 ℓ 750 mℓ__
12	11p × 100 = £	__£11__

B

		ANSWER
1	Find the missing number in this series. 1, 10, 100, , 10 000	__1000__
2	Find the product of 10 and 45.	__450__
3	How many times greater than 0.1 is 10?	__100__
4	What distance in km and m is twice as long as 4.8 km?	__9__ km __600__ m
5	Divide 52p exactly by 4.	__13__ p
6	Find the difference in pence between 15 TENS and 40 FIVES.	__350__ p
7	A journey of 7 km cost 91p. How much was the charge per km?	__13__ p
8	Write to the nearest $\frac{1}{2}$ kg (a) 1 kg 620 g (b) 2 kg 390 g.	(a) __$1\frac{1}{2}$__ kg (b) __$2\frac{1}{2}$__ kg
9	Find the area of a rectangle 7 cm long and 3 cm wide. Give the unit of measurement.	__21 cm^2__
10	By how many pence is $\frac{1}{5}$ of £3 greater than $\frac{1}{6}$ of £3?	__10__ p
11	58 cm divided by 10 = mm.	__58__ mm
12	Write as a decimal fraction of a kg the sum of $\frac{1}{4}$ kg and 450 g.	__$\frac{7}{10}$__ kg

C

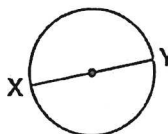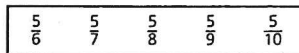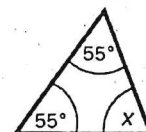|		ANSWER
1	What decimal fraction must be added to the number shown on the abacus picture to equal 50?	__$\frac{1}{2}$__
2	What fraction of 28 kg is (a) 7 kg (b) 4 kg?	(a) __$\frac{1}{4}$__ (b) __$\frac{1}{7}$__
3	18/6/93 By how many months is 18 February 1994 later than the given date?	__8__ months
4	Write a quarter of a metre (a) in cm (b) as a decimal fraction of a metre.	(a) __25__ cm (b) __$\frac{1}{4}$__ m
5	The radius of this circle is 0.9 cm. Find the length of the line XY in mm.	__18__ mm
6	$\frac{5}{6}$ $\frac{5}{7}$ $\frac{5}{8}$ $\frac{5}{9}$ $\frac{5}{10}$ Which of these fractions is (a) the largest (b) the smallest?	(a) __$\frac{5}{6}$__ (b) __$\frac{5}{10}$__
7	A cyclist travelled 72 km in 3 hours. What was his average speed in km/h?	__24__ km/h
8	The perimeter of this regular hexagon is 7.2 cm. Find the length of one side (a) in cm (b) in mm.	(a) __1·2__ cm (b) __12__ mm
9	Find the value in pence of x and y.	x __27__ p y __48__ p
10	How many degrees are there in the angle marked x ?	__70__ °
11	Amounts spent — Tim 10p Jane 20p Saima 40p David 30p. Find the average amount spent by the children.	__25__ p
12	David takes four 5-mℓ spoonfuls of medicine each day. For how many days will 0.2 ℓ last him?	__4__ days
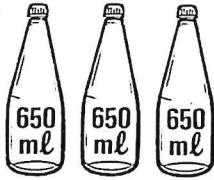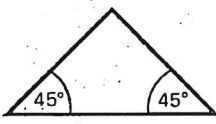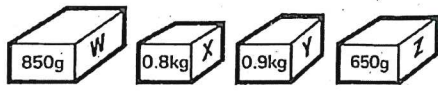
Price Chart (question 9):

PRICE CHART	mass	100g	150g	200g	250g	300g
	cost	18p	x	36p	y	54p

A

		ANSWER
1	+ 6 + 9000 + 400 = 9456	50
2	$\frac{4}{5}$ = hundredths	$\frac{80}{100}$
3	£4·05 − 50p = £	£ 3·55
4	24 + 24 + 24 + 24 + 24 + 24 + 24	168
5	1 ℓ 600 mℓ ÷ 8 = mℓ	200 mℓ
6	£3·60 ÷ 10 = p	36 p
7	9.6 cm − 15 mm = mm	945 mm
8	£3·10 = 3 FIFTIES + TWENTIES	8 TWENTIES
9	10² − 5²	75
10	8 km − 1700 m = km	6·3 km
11	$\frac{3}{4}$ kg − 260 g = g	490 g
12	$\frac{5}{7}$ of £63	£ 45
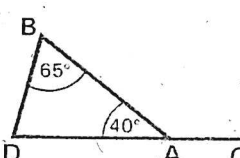
B

		ANSWER
1	How many times greater is £8 than 8p?	100
2	Find the diameter of a circle the radius of which is (a) 5.5 cm	(a) 11 cm
	(b) 46 mm.	(b) 92 mm
3	Reduce 125 by 99.	26
4	How many hundreds are there in 10 000?	100
5	Multiply 55p by 10.	£ 5·50
6	How many hours in 3 days?	72
7	Write in £s the total of 7 FIVES, 4 TENS and 9 TWOS.	£0·93
8	500 g cost 28p. Find the cost of 1$\frac{1}{2}$ kg.	84 p
9	Multiply 9.5 cm by 100. Write the answer in m.	9·5 m
10	Write the sum of 4$\frac{7}{10}$ and 3$\frac{9}{10}$ as a decimal.	8·6
11	$\frac{3}{4}$ of a number is 9. What is the number?	12
12	A 4-m length of ribbon is cut into 5 equal pieces. Find the length in cm of one piece.	80 cm

C

		ANSWER
1	How much change from a FIFTY after buying 4 badges at 9p each?	14 p
2	Write as a decimal fraction the difference between $\frac{9}{10}$ and $\frac{99}{100}$.	$\frac{9}{100}$
3	How many mℓ remain from 2 ℓ after filling the 3 bottles? [bottles: 650 mℓ, 650 mℓ, 650 mℓ]	50 mℓ
4	15th of November was on a Wednesday. On which day of the week was the 29th of November?	Wednesday
5	An aircraft left Gatwick at 11.00 and by 13.00 it had travelled 1850 km. What was its average speed in km/h?	925 km/h
6	Write the number nearest to 99 which can be divided exactly by 8.	96
7	Munch Bars are 63p for a packet of 6. Find the cost of 2 bars.	21 p
8	Mark 9, Rachael 7, Matthew , Jenny 6. In a test the average score of the four children was 8. What was Matthew's score?	10
9	The length of Pete's pace is 50 cm. How many paces does he take when walking 1 km?	20
10	Name this triangle by its angles [triangle with 45° and 45°]	isosceles
11	[boxes: 850g W, 0.8kg X, 0.9kg Y, 650g Z] Which two of the boxes together have a mass of 1.5 kg?	W, Z
12	$\begin{array}{r}19\ \text{rem. }5\\6\overline{)x}\end{array}$ Find the value of x.	119

A
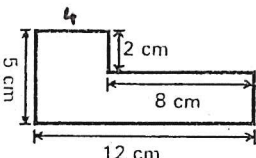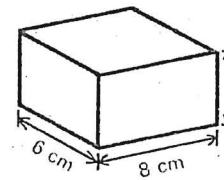
		Answer
1	$300 + 15 + 5000$	5315
2	45 FIVES = £	£ 2.25
3	$\frac{27}{100}$ of 1 metre = cm	27 cm
4	$200 - 0.45$	199.55
5	The ninth month of the year is	September
6	709×8	5672
7	$3.7 =$ hundredths	370 hundredths
8	$17\frac{1}{2}p + 5\frac{1}{2}p + 20p = £$	£ 0.43
9	$140 g +$ g $= 0.2$ kg	60 g
10	£23·00 ÷ 5	£ 4.60
11	0.7 litres $- \frac{1}{2}$ litre = ml	200 ml
12	$\frac{3}{10} + \frac{2}{5}$	$\frac{7}{10}$

B

		Answer
1	What number is 32 greater than 290?	322
2	Write as a decimal 5 tens plus 18 tenths.	51.8
3	How many FIVES must be taken from 3 FIFTIES to leave £1·15?	7 FIVES
4	How many eighths are there in $7\frac{5}{8}$?	$\frac{61}{8}$
5	29th June is on a Friday. On which day is the 4th July?	Wednesday
6	Share 75p equally among 8 children. Find (a) how much each	(a) 9 p
	(b) how many pennies are left.	(b) 3 p
7	What weight in kg is double 3 kg 750 g?	7.5 kg
8	Which of these numbers will divide exactly by both 6 and 9 without a remainder? 24 36 48 63	36
9	Find the area of a playground 30 m long and 18 m wide.	$540 m^2$
10	Find the cost of 400 g at 25p per kg.	10 p
11	From $1\frac{3}{8}$ subtract $\frac{1}{2} + \frac{3}{4}$.	$\frac{1}{8}$
12	How many degrees in (a) ∠ BDA	(a) 75 °
	(b) ∠ BAC?	(b) 140 °

C

		Answer
1	Approximate (a) 9.82 to the nearest whole one	(a) 10
	(b) £10·48 to the nearest £1	(b) £ 10
	(c) 3.25 kg to the nearest kg.	(c) 3 kg
2	The kilometre reading on the instrument in a car is 9946.2. What distance has the car to travel for it to read ten thousand kilometres?	53.8 km
3	What fraction in its lowest terms is equal to (a) 8 out of 20	(a) $\frac{2}{5}$
	(b) 25 out of 40	(b) $\frac{5}{8}$
	(c) 70 out of 100?	(c) $\frac{7}{10}$
4	10 articles cost £2·40. Find the cost of 3.	72 p
5	John was born on 30.6.'68. How old will he be in years and months on 1st September 1980?	12 years 2 months
6	Find the sum of the numbers between 60 and 80 which are divisible by 9.	135
7	Find (a) the perimeter of the shape	(a) 34 cm
	(b) its area.	(b) 44 cm²
8	1.000 screws weigh 4.2 kg. Find the weight in g of (a) 100 screws	(a) 420 g
	(b) 1 screw.	(b) 4.2 g
9	A shopkeeper bought 6 balls for £1·32 and sold them to make a total profit of 48p. For how much did he sell each ball?	30 p
10	A car uses 7 litres of petrol to travel 100 km. How many litres are required for 1600 km?	112 ℓ
11	Three lines measure 0.04 m; 47 mm; 3.8 cm. Find the difference between the longest and shortest lines.	9 mm
12	48 centimetre cubes fit exactly into the bottom of this box. The box is 5 cm deep. How many cm cubes are needed to fill it?	240

Write the numbers 1 to 20 down the side of a sheet of paper.
Write alongside these numbers the **answers only** to the following questions.
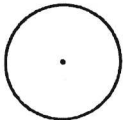Work as quickly as you can.
Time allowed − **10 minutes.**

1. $170 + 280$ 450

2. $(\frac{1}{5} \text{ of } 45) - (\frac{1}{7} \text{ of } 63)$ O

3. $(8 \times 8) + (6 \times 6)$ 100

4. $(450 \div 10) - (3500 \div 100)$ 10

5. Write in figures
   nine thousand and sixteen.   9016

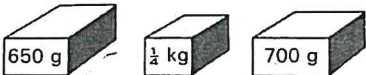6. The diameter of this circle is 1 cm 6 mm. What is the radius of the circle in mm?   8mm

7. Add the numbers between 40 and 50 which can be divided by 7 without a remainder.   91

8. | $\frac{3}{4}$ | $\frac{2}{5}$ | $\frac{5}{6}$ | $\frac{3}{8}$ | $\frac{5}{10}$ | $\frac{25}{100}$ |
   Which of the fractions has the same value as a half? $\frac{5}{10}$
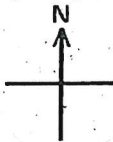
9. 650 g $\frac{1}{4}$ kg   700 g
   How much more than $1\frac{1}{2}$ kg is the total mass of the three boxes?   100g

10. Which 3 coins are given in change from £2 after spending 60p and 78p?   50p, 10p, 2p

11. Find the cost of one pencil if 10 pencils cost £1·10.   11p

12. How many minutes are there from 11.17 a.m. to 12.15 p.m.?   58 mins

13. A boy stands facing West and turns left through 3 right angles. In which direction is he then facing?   North

14. Find the cost of 300 mℓ if $\frac{1}{2}$ ℓ costs 35p.   21p

15. If a car travels at a speed of 80 km/h, how far will it travel from 9.30 a.m. to noon?   200km

16. | RED | BLUE | OTHER COLOURS |
    The diagram represents the 64 cars which passed a school in one hour. How many of the cars were blue? $\frac{3}{8} = 24$

17. What fraction in its lowest terms is 900 g of 1 kg? $\frac{9}{10}$

18. Write to the nearest £ the sum of £3·80 and £2·69.   £6

19. Find the cost of 100 buttons if one button costs 8p.   £8

20. 100 p   100 FIVES   50 TENS   50 TWENTIES   Write as £s the total of the contents of the packets.   £21
    100   500   500   1000

Write the numbers 1 to 20 down the side of a sheet of paper.
Write alongside each number the **answers only** to the following questions.
Work as quickly as you can.
Time allowed — **10 minutes.**

1   Write in figures to the nearest hundred
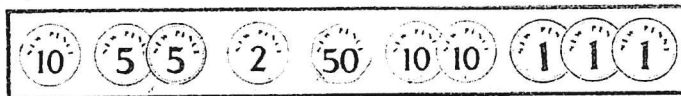   six thousand four hundred and fifty.   **6500**

2   Find the missing number of FIVES.
    £1·65 = 2 FIFTIES, 4 TENS,   FIVES   **5**

3   In this set of the factors of 30, one is missing. Which is it?   **5**
    F = {1, 10, 15,   , 6, 30, 3, 2}

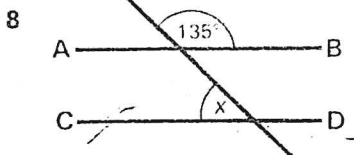4   Write as a decimal the sum of 3 hundreds and 109 hundredths.   **1·12**

5   How many h and min from 11.52 a.m. to 2.27 p.m.?   **2h 35mins.**

6   By counting in the given order find the total value of the coins in the box.

       95p.

7   Find the total when 1.05 is added together 8 times.   **8·4**

8   The lines AB and CD are parallel.
    Find the size of the angle marked *x*.   **45°**

9   ¾ of a sum of money is 54p. Find the whole amount.   **72p**

10 26 × 8 = 208. Write the answer to 260 × 0.8.   **208**

11 On a map a road is shown as 9 cm long, which represents a distance of 4.5 km. Write and
    complete the scale 1 cm to   m.   **½ or 0.5**

12 Take 650 mℓ from 5 litres and give the answer to the nearest 0.5 ℓ.   **4½L**

13 A regular hexagon has sides each measuring 58 mm. Find its perimeter in cm.   **34·8cm**

14 200 g of beef cost 38p. Find the price of the beef per ½ kg.   **95p**

15 The circumference of a wheel measures 2.5 m. How many times will it turn in travelling
    500 m?   **200**

16 A garden plot measures 12.8 m long and 8 m wide. Find its area in m².   **102·4m²**

17 Postcards are bought at 3 p each and sold at 5p each. How much profit is made
    after selling 200 postcards?   **£4**

18 The weight of a 10p coin is 11.3 g. Find the weight in kg of the coins in a
    £10 bag of TENS.   **1·13kg**

19 How many 6 cm square tiles are required to cover a rectangular surface
    measuring 54 cm long and 48 cm wide?   **72**

20 Of these 20 examples 6 were wrongly answered. What fraction, in its
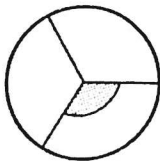   lowest terms, was correct?   **7/10**

Write the numbers 1 to 20 down the side of a sheet of paper.
Write alongside these numbers the **answers only** to the following questions.
Work as quickly as you can.
Time allowed — **10 minutes.**

1 Write the sum of £0·44, £0·56 and £1·55 to the nearest TEN. £2·60

2 The circle is divided into three equal parts. How many degrees are there in the angle marked at the centre? 120°

3 A car travelled for 15 minutes at a speed of 48 km/h. What distance did it travel? 12 km

4 The circumference of a wheel is 1.25 m. How many m will it travel in 10 turns? 12·5m
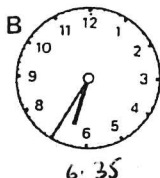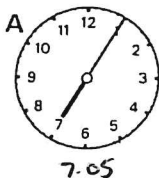
5 Make 306 one hundred times smaller. 3·06

6 Write as a decimal the total of 20, $\frac{8}{10}$ and $\frac{19}{100}$. 20·99

7 Subtract $\frac{2}{9}$ of 27 from $\frac{3}{5}$ of 45. 21

8 A B Clock A is 10 minutes fast. How many minutes slow is clock B? 20mins.
7·05   6·35

9 By how many m is 648 m less than $\frac{3}{4}$ km? 102m

10 Write the decimal fraction which is half-way between 0.4 and 0.38. $\frac{39}{100}$

11 8 9 9 9 . 4 This reading is taken from a dial in a car. It shows the number of km travelled. What will be the reading after travelling a further 700 m? 9000·1

12 If one article costs £0·44 what will be the cost of 100? £44

13 Find the cost of $4\frac{3}{4}$ kg at 40p per kg. £1·90

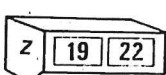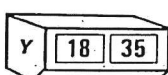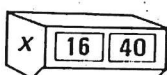**14** By how many sixths is $\frac{1}{2}$ less than $\frac{2}{3}$? $\frac{1}{6}$

15 Which 3 coins were given in change from £3 after spending £1·28 and £1·56? 10p 5p 1p.

16 $3\frac{1}{2}$ litres + 900 ml + 600 ml = ℓ 5

17 V 06 14   W 07 20   X 16 40   Y 18 35   Z 19 22
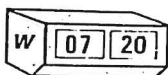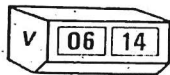
Which of these 24-hour clock times is nearest to twenty to seven in the evening? 18·35 (y)

18 How many g more than $\frac{1}{2}$ kg is the sum of 334 g and 286 g? 120g

19 50 cm of tape cost 28p. Find the cost of 1.25 m. 70p

20 Find in cm the perimeter of the shaded shape. 24 cm
6 cm
6 cm
2 cm
2 cm

Number

A Write in figures.

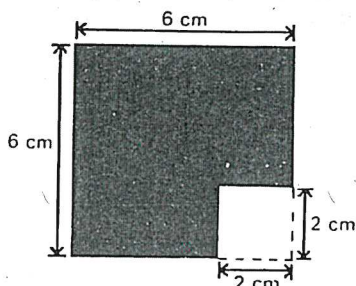|						
nine hundred and sixty	460	four thousand and six	4006	one point one nine	1·19
four hundred and eight	408	ten point one	10·1	twenty point nought two	20·02
eight thousand and seventy	8070	three point nought five	3·05		

B

3000 + 500 + __ + 9 = 3569	60	7.0 + 0.5 + 0.01 =	7·51
6000 + __ + 80 + 1 = 6881	800	10.0 + 0.4 =	10·4
3 + 40 + 9000 =	9043	6.0 + 0.02 =	6·02
(1000 × 4) + (100 × 9) + (10 × 3) =	4930	20.0 + 0.08 =	20·08

C

				Write as a decimal.			
456 = __ tens + 6 units	45 tens	1 tenth	0·1	$\frac{9}{10}$	0·9
903 = __ tens + 3 units	90 tens	1 hundredth	0·01	$\frac{18}{100}$	0·18
1875 = __ tens + 5 units	187 tens	101 tenths	10·1	$\frac{95}{100}$	0·95
5102 = __ hundreds + 2 units	51 hundreds	105 hundredths	1·05	$\frac{20}{100}$	0·20
9040 = __ hundreds + 4 tens	90 hundreds				

D Write the value of the figure underlined.

4_6_7	6 tens	3_7_51	7 hundreds	32.1_4_	$\frac{1}{10}$	86_5_.8	$\frac{5}{10}$
8479	8 thousands	200_8_	8 units	10.9_5_	$\frac{5}{100}$	40.0_6_	$\frac{6}{100}$
3_2_.5	2 units	1_6_0.2	6 tens	0.5_6_	$\frac{5}{10}$	20.0_2_	$\frac{2}{100}$

E How many times smaller is

5 than 50	10	96 than 960	10	0.6 than 6.0	10	0.3 than 30	100
7 than 700	100	23 than 2300	100	0.1 than 10.0	100	0.07 than 0.7	10
270 than 2700	10	54 than 5400	100	0.08 than 8.0	100	0.25 than 25?	100

How many times larger is

390 than 39	10	400 than 40	10	8.0 than 0.8	10	50 than 0.5	100
4500 than 45	100	9000 than 90	100	16.0 than 1.6	10	0.4 than 0.04	10
3100 than 31	100	6140 than 614	10	9.0 than 0.09	100	17 than 0.17?	100

F

7 + 8	15	17 + 7	24	11 − 6	5	26 − 9	17
6 + 5	11	8 + 25	35	13 − 8	5	22 − 6	16
9 + 9	18	59 + 6	65	15 − 9	6	43 − 5	38
4 + 7	11	5 + 76	81	11 − 8	3	61 − 4	57
8 + 3	11	46 + 8	54	14 − 7	7	85 − 7	78
9 + 7	16	7 + 89	96	12 − 3	9	93 − 9	84
7 + 5	12	38 + 7	45	17 − 8	9	32 − 8	24
5 + 9	14	4 + 59	63	14 − 9	5	54 − 6	48
4 + 8	12	69 + 5	74	12 − 7	5	72 − 5	67
9 + 4	13	8 + 34	42	14 − 8	6	41 − 3	38
8 + 9	17	77 + 6	83	13 − 6	7	82 − 9	73
6 + 6	12	9 + 68	77	11 − 7	4	95 − 6	89
3 + 8	11	43 + 9	52	13 − 4	9	67 − 9	58
8 + 6	14	6 + 87	93	16 − 7	9	56 − 8	48

G Find the value of x.

$x − 9 = 3$	12	$14 − x = 5$	9	$x + 7 = 13$	6	$8 + x = 14$	6
$8 + x = 15$	7	$x − 5 = 8$	13	$12 − x = 4$	8	$x − 7 = 9$	16
$x − 7 = 4$	11	$9 + x = 15$	6	$9 + x = 18$	9	$x + 9 = 17$	8
$x + 2 = 11$	9	$x − 8 = 8$	16	$x − 5 = 7$	12		

Number

A

7 × 7	49	(6 × 9) + 8	62	36 ÷ 9	4	30 ÷ 8 — 3 rem. 6
8 × 6	48	(4 × 8) + 7	39	49 ÷ 7	7	16 ÷ 9 — 1 rem. 7
3 × 7	21	(5 × 7) + 6	41	30 ÷ 5	6	20 ÷ 3 — 6 rem. 2
5 × 9	45	(6 × 3) + 2	20	72 ÷ 8	9	54 ÷ 8 — 6 rem. 6
7 × 8	56	(1 × 9) + 5	14	24 ÷ 6	4	80 ÷ 9 — 8 rem. 8
6 × 6	36	(2 × 7) + 6	20	0 ÷ 4	0	63 ÷ 8 — 7 rem. 7
4 × 5	20	(3 × 9) + 6	33	27 ÷ 9	3	20 ÷ 7 — 2 rem. 6
9 × 2	18	(7 × 7) + 4	53	42 ÷ 6	7	53 ÷ 9 — 5 rem. 8
0 × 3	0	(5 × 6) + 3	33	64 ÷ 8	8	21 ÷ 8 — 2 rem. 5
9 × 9	81	(6 × 8) + 5	53	40 ÷ 5	9	3 ÷ 5 — 0 rem. 3
8 × 5	40	(0 × 5) + 3	3	18 ÷ 9	2	40 ÷ 7 — 5 rem. 5
6 × 7	42	(8 × 8) + 7	71	56 ÷ 7	8	19 ÷ 5 — 3 rem. 4
3 × 8	24	(4 × 9) + 5	41	28 ÷ 4	7	69 ÷ 9 — 7 rem. 6
9 × 4	36	(8 × 7) + 4	60	32 ÷ 8	4	48 ÷ 7 — 6 rem. 6
4 × 6	24	(9 × 6) + 5	59	81 ÷ 9	9	16 ÷ 6 — 2 rem. 4
7 × 9	63	(2 × 8) + 6	22	36 ÷ 6	6	45 ÷ 8 — 5 rem. 5
4 × 3	12	(4 × 7) + 4	32	35 ÷ 5	7	57 ÷ 6 — 9 rem. 3
9 × 8	72	(8 × 9) + 8	80	54 ÷ 9	6	31 ÷ 8 — 3 rem. 7
7 × 4	28	(7 × 6) + 4	46	48 ÷ 6	8	61 ÷ 7 — 8 rem. 5
3 × 5	15	(3 × 6) + 4	22	63 ÷ 7	9	62 ÷ 9 — 6 rem. 8

B Find the value of x.

$5 \times x = 40$	8	$x \div 8 = 9$	72	$36 \div x = 9$	4
$x \div 6 = 5$	30	$5 \times x = 45$	9	$4 \times x = 24$	6
$x \times 7 = 42$	6	$x \div 9 = 9$	81	$16 \div x = 4$	4
$27 \div x = 9$	3	$x \times 4 = 32$	8	$x \times 8 = 64$	8
$9 \times x = 63$	7	$21 \div x = 3$	7	$x \div 4 = 7$	28

C

$\frac{1}{2}$ of 18	9	$\frac{1}{4}$ of 28	7	$\frac{3}{4}$ of 20	15	$\frac{2}{5}$ of 45	18
$\frac{1}{3}$ of 21	7	$\frac{1}{5}$ of 40	8	$\frac{5}{6}$ of 54	45	$\frac{4}{7}$ of 35	20
$\frac{1}{6}$ of 36	6	$\frac{1}{8}$ of 32	4	$\frac{7}{8}$ of 48	42	$\frac{7}{9}$ of 63	49
$\frac{1}{9}$ of 45	5	$\frac{1}{10}$ of 100	10	$\frac{3}{10}$ of 70	21	$\frac{9}{10}$ of 80	72

D Find the whole number when

$\frac{1}{3}$ is 8	24	$\frac{1}{5}$ is 6	30	$\frac{5}{6}$ is 30	36	$\frac{4}{5}$ is 16	20
$\frac{1}{6}$ is 7	42	$\frac{1}{8}$ is 9	72	$\frac{7}{8}$ is 21	24	$\frac{2}{7}$ is 12	42
$\frac{1}{9}$ is 4	36	$\frac{1}{10}$ is 12	120	$\frac{4}{9}$ is 36	81	$\frac{7}{10}$ is 49	70

E

11 × 10	110	130 ÷ 10	13	1.3 × 10	13	4.0 ÷ 10	0.4
100 × 10	1000	800 ÷ 10	80	0.96 × 10	9.6	66.0 ÷ 10	6.6
145 × 10	1450	4620 ÷ 10	462	0.02 × 10	0.2	0.3 ÷ 10	0.03
15 × 100	1500	1900 ÷ 100	19	10.8 × 100	1080	7.0 ÷ 100	0.07
120 × 100	12000	6500 ÷ 100	65	0.05 × 100	5	19.0 ÷ 100	0.19
104 × 100	10400	10.000 ÷ 100	100	1.13 × 100	113	403.0 ÷ 100	4.03

F Find the missing numerator or denominator.

$\frac{2}{5} = \frac{4}{10}$ $\quad$ $\frac{3}{4} = \frac{9}{12}$ $\quad$ $\frac{1}{5} = \frac{20}{100}$ $\quad$ $\frac{1}{10} = \frac{10}{100}$ $\quad$ $\frac{50}{100} = \frac{1}{2}$

$\frac{2}{3} = \frac{8}{12}$ $\quad$ $\frac{5}{6} = \frac{10}{12}$ $\quad$ $\frac{3}{5} = \frac{60}{100}$ $\quad$ $\frac{3}{10} = \frac{30}{100}$ $\quad$ $\frac{75}{100} = \frac{3}{4}$

$\frac{5}{8} = \frac{10}{16}$ $\quad$ $\frac{7}{20} = \frac{35}{100}$ $\quad$ $\frac{1}{25} = \frac{4}{100}$ $\quad$ $\frac{7}{10} = \frac{70}{100}$ $\quad$ $\frac{20}{100} = \frac{1}{5}$

Measures : Shapes

A

1 cm = _10_ mm	0.01 m = _1_ cm	0.25 m = _250_ mm	$\frac{1}{4}$ m = _25_ cm
0.1 cm = _1_ mm	0.25 m = _25_ cm	0.75 m = _750_ mm	$\frac{1}{2}$ m = _50_ cm
1 m = _100_ cm	0.75 m = _75_ cm	1 km = _1000_ m	$\frac{3}{4}$ m = _75_ cm
0.1 m = _10_ cm	1 m = _1000_ mm	0.5 km = _500_ m	$\frac{1}{2}$ m = _500_ mm
0.8 m = _80_ cm	0.5 m = _500_ mm	0.75 km = _750_ m	$\frac{3}{4}$ m = _750_ mm

B

184 mm = _18_ cm _4_ mm	390 mm = _39_ cm	3258 m = _3_ km _258_ m
307 mm = _30_ cm _7_ mm	412 mm = _41.2_ cm	5106 m = _5_ km _106_ m
465 cm = _4_ m _65_ cm	800 cm = _8_ m	8200 m = _82_ km
1000 cm = _10_ m _0_ cm	330 cm = _3.3_ m	6500 m = _65_ km
340 cm = _3_ m _40_ cm	785 cm = _7.85_ m	7750 m = _77.5_ km

C

3000 g = _3_ kg	5000 mℓ = _5_ ℓ	$\frac{1}{2}$ kg = _500_ g
5280 g = _5_ kg _280_ g	2884 mℓ = _2_ ℓ _884_ mℓ	$\frac{1}{4}$ kg = _250_ g
8090 g = _8_ kg _90_ g	6160 mℓ = _6_ ℓ _160_ mℓ	$\frac{3}{4}$ kg = _750_ g
4400 g = _4.4_ kg	7300 mℓ = _7.3_ ℓ	$\frac{1}{2}$ ℓ = _500_ mℓ
7250 g = _7.25_ kg	900 mℓ = _0.9_ ℓ	$\frac{3}{4}$ ℓ = _750_ mℓ

D

240 g + _260_ g = $\frac{1}{2}$ kg	$\frac{1}{2}$ ℓ + _92_ mℓ = 592 mℓ	820 g − 0.7 kg = _120_ g
370 g + _130_ g = $\frac{1}{2}$ kg	$\frac{1}{2}$ ℓ + _135_ mℓ = 634 mℓ	925 mℓ − 0.8 ℓ = _125_ mℓ
406 g + _94_ g = $\frac{1}{2}$ kg	$\frac{1}{2}$ ℓ + _327_ mℓ = 827 mℓ	0.6 kg + 60 g = _660_ g
215 g + _35_ g = $\frac{1}{4}$ kg	$\frac{1}{4}$ ℓ + _60_ mℓ = 310 mℓ	0.25 ℓ + 120 mℓ = _370_ mℓ
198 g + _52_ g = $\frac{1}{4}$ kg	$\frac{1}{4}$ ℓ + _175_ mℓ = 425 mℓ	0.75 kg + 240 g = _990_ g

E

Work across the page.
Write to the

nearest whole number	$19\frac{3}{4}$ _20_	$10\frac{1}{3}$ _10_	14.4 _14_	11.5 _12_
nearest hundred	308 _300_	953 _1000_	1326 _1300_	2950 _3000_
nearest £1	£17·09 _£17_	£4·83 _£5_	£32·50 _£33_	£129·28 _£129_
nearest cm	7 cm 2 mm _7_ cm	109 mm _11_ cm	39.6 cm _40_ cm	
nearest m	8 m 51 cm _9_ m	730 cm _7_ m	15.3 m _15_ m	
nearest km	$12\frac{1}{4}$ km _12_ km	18 km 900 m _19_ km	78.5 km _79_ km	
nearest kg	4 kg 300 g _4_ kg	9 kg 550 g _10_ kg	99.25 kg _99_ kg	
nearest $\frac{1}{2}$ kg	6 kg 200 g _6_ kg	12 kg 380 g _12½_ kg	5 kg 600 g _5½_ kg	
nearest ℓ	5 ℓ 400 mℓ _5_ ℓ	9 ℓ 600 mℓ _10_ ℓ	3.7 ℓ _4_ ℓ	

F

Write the letter of the shape which is

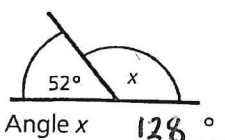|		
a right-angled triangle _E_	a rhombus _G_	an obtuse-angled triangle _B_
a rectangle _D_	a parallelogram _A_	an isosceles triangle _F_

G

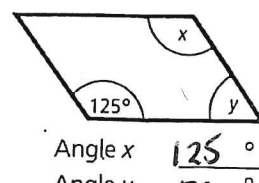How many degrees are there in each of the angles marked x, y and z?

Angle x _128_ °
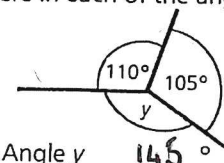
Angle y _145_ °
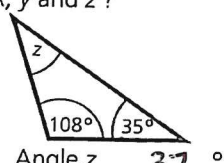
Angle z _37_ °

Angle x _125_ °
Angle y _55_ °

Money : Time

A Write in each box the coins which make up the given amount. Use the least possible number of coins.

32p	20p 10p 2p		54p	50p 2p 2p		65p	50p 10p 5p
80p	50p 20p 10p		67p	50p 10p 5p 2p		18p	10p 5p 2p 1p
26p	20p 5p 1p		71p	50p 20p 1p		59p	50p 5p 2p 2p

B Find the change from each amount.

Amount	Spent	CHANGE		Amount	Spent	CHANGE		Amount	Spent	CHANGE
50p	24p	26 p		90p	81p	9 p		£3	£2·13	£ 0·87
50p	35p	15 p		60p	52p	8 p		£4	£1·25	£ 2·75
50p	12p	38 p		30p	23p	7 p		£4	£2·48	£ 1·52
50p	37p	13 p		45p	41p	4 p		£5	£3·09	£ 1·91
50p	28p	22 p		£1	24p	76 p		£5	£2·46	£ 2·54
50p	19p	31 p		£1	37p	63 p		£5	£1·67	£ 3·33
50p	23p	27 p		£2	£1·69	31 p		£5	£2·11	£ 2·89
50p	16p	34 p		£2	£1·06	94 p		£5	£0·88	£ 4·12

C

10 FIVES = 25 TWOS	£7·50 = 15 FIFTIES	£2·55 = 12 TWENTIES, 3 FIVES
6 FIVES = 15 TWOS	£10·00 = 20 FIFTIES	£1·72 = 8 TWENTIES, 6 TWOS
14 FIVES = 7 TENS	£3·80 = 19 TWENTIES	£2·78 = 13 TWENTIES, 9 TWOS
100 FIVES = 50 TENS	£10·00 = 50 TWENTIES	£4·30 = 38 TENS, 1 FIFTY
12 FIVES = 3 TWENTIES	£5·00 = 50 TENS	£3·80 = 7 FIFTIES, 3 TENS
50 TENS = 25 TWENTIES	£7·50 = 75 TENS	£4·25 = 8 FIFTIES, 5 FIVES
45 TENS = 9 FIFTIES	£5·00 = 100 FIVES	£2·90 = 5 FIFTIES, 4 TENS
65 TENS = 13 FIFTIES	£2·20 = 44 FIVES	£1·64 = 3 FIFTIES, 7 TWOS

D

24p + 36p + 50p = £ 1·10	£1·35 − 60p = £ 0·75	£2·24 + £3·09 = £ 5·33
39p + 41p + 22p = £ 1·02	£2·70 − 85p = £ 1·85	£4·75 − £2·80 = £ 1·95
25p + 75p + 9p = £ 1·09	£4·60 − 99p = £ 3·61	£1·62 + £1·38 = £ 3·00
63p + 28p + 12p = £ 1·03	£2·29 − £0·74 = £ 1·55	£1·50 − £0·77 = £ 0·73
82p + 63p + 15p = £ 1·60	£3·20 − £2·93 = £ 0·27	£3·87 + £0·45 = £ 4·32

E Find the cost of

5 kg at 25p per kg £ 1·25	$1\frac{1}{2}$ℓ at 28p per ℓ £ 0·42	5 m at £1·18 per m £ 5·90
$3\frac{1}{2}$ kg at 30p per kg £ 1·05	3 ℓ at 55p per ℓ £ 1·65	75 cm at £1 per m £ 0·75
$4\frac{1}{2}$ kg at 20p per $\frac{1}{2}$ kg £ 1·80	$2\frac{1}{2}$ ℓ at 22p per ℓ £ 0·55	$4\frac{1}{2}$ m at 50p per m £ 4·50
2 kg at 50p per 200 g £ 5·00	$\frac{1}{2}$ ℓ at 60p per 100 mℓ £ 3·00	$1\frac{1}{4}$ m at 20p per $\frac{1}{2}$ m £ 0·50
$6\frac{1}{2}$ kg at 60p per kg £ 3·90	750 mℓ at 26p per $\frac{1}{2}$ ℓ £ 0·39	2 m at 30p per 20 cm £ 3·00

F Write the times shown on these clocks   (a) in 12-hour clock times using a.m. or p.m.
(b) in 24-hour clock times.

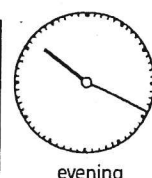(a) 7·37 am   (b) 07:37   morning

(a) 1·24 pm   (b) 13:24   afternoon

(a) 12·45 am   (b) 00·45   morning

(a) 10·19 pm   (b) 22:19   evening

A

(a)

			(b)		
5 + 6	11		10 × 10	100
8 + 8	16		4 × 7	28
0 + 7	7		9 × 3	27
7 + 8	15		8 × 6	48
4 + 7	11		1 × 8	8
18 + 9	27		5 × 9	45
15 + 8	23		7 × 7	49
3 + 29	32		0 × 0	0
7 + 36	43		4 × 8	32
14 + 19	33		9 × 7	63

12 − 5	7		24 ÷ 3	8
9 − 0	9		40 ÷ 8	5
11 − 3	8		0 ÷ 6	0
14 − 5	9		54 ÷ 9	6
15 − 9	6		7 ÷ 7	1
24 − 6	18		42 ÷ 7	6
26 − 9	17		81 ÷ 9	9
32 − 8	24		36 ÷ 4	9
58 − 9	49		63 ÷ 9	7
47 − 20	27		56 ÷ 8	7

B

(6 × 6) + 5	41
(9 × 1) + 7	16
(5 × 8) + 4	44
(8 × 0) + 6	6
(10 × 5) + 8	58
(8 × 8) + 6	70
(3 × 3) + 2	11
(9 × 8) + 7	79
(4 × 9) + 5	41
(7 × 6) + 3	45

29 ÷ 3	9	rem. 2
67 ÷ 8	8	rem. 3
21 ÷ 4	5	rem. 1
6 ÷ 7	0	rem. 6
39 ÷ 5	7	rem. 4
70 ÷ 9	7	rem. 7
51 ÷ 6	8	rem. 3
13 ÷ 7	1	rem. 6
52 ÷ 5	10	rem. 2
4 ÷ 9	0	rem. 4

C

27 × 8	216
49 × 6	294
107 × 7	749
93 × 10	930
180 × 10	1800
95 × 20	1900
86 × 40	3440
100 × 80	8000
98 × 100	9800
204 × 100	20400

102 ÷ 3	34
336 ÷ 4	84
648 ÷ 6	108
590 ÷ 10	59
800 ÷ 10	80
540 ÷ 20	27
420 ÷ 60	7
1050 ÷ 50	21
4000 ÷ 100	40
2900 ÷ 100	29

D Write these numbers.

Fifty thousand and seven	50,007
Sixty-two thousand four hundred and two	62,402
One hundred and forty thousand and eleven	140,011
Two hundred and six thousand and nine	206,009
30 000 + 400 + 6	30,406
100 000 + 7000 + 50 + 8	107,058
(4 × 1000) + (6 × 100) + (3 × 10) + 8	4638
(9 × 1000) + (7 × 10) + 5	9075
(3 × 1000) + (4 × 10)	3040
1 million	1,000,000
1½ million	1,500,000
¼ million	250,000
2.7 million	2,700,000

E Write as decimals.

47 tenths	4·7
201 tenths	20·1
4 hundredths	0·04
309 hundredths	3·09
580 hundredths	5·80
603 thousandths	0·603
75 thousandths	0·075
3009 thousandths	3·009
$9 + \frac{3}{10} + \frac{8}{100}$	9·38
$10 + \frac{7}{100} + \frac{2}{1000}$	10·072
5 tenths + 2 hundredths	0·52
17 hundredths and 6 thousandths	0·176

F How many tenths equal

6.8	68
14.9	149
30.4?	304

How many hundredths equal

0.93	93
7.05	705
3.2?	320

How many thousandths equal

0.003	3
0.078	78
1.52	152
2.8	2800
4.09?	4090

G

5.03 + 0.7	5·73
2.5 + 1.54	4·04
0.06 + 1.04	1·1
3.7 + 0.35	4·05
0.28 + 1.625	1·905
2 − 1.4	0·6
1.4 − 0.9	0·5
10 − 8.75	1·25
4.8 − 3.76	1·04
0.7 − 0.58	0·12

H

6.45 × 10	64·5
0.873 × 10	8·73
2.03 × 100	203
0.092 × 100	9·2
1.64 × 1000	1640
0.053 × 1000	53
1.8 × 5	9
4 × 1.63	6·52
0.09 × 8	0·72
7 × 2.08	14·56
1.063 × 6	6·378

I

79 ÷ 10	7·9
40.2 ÷ 10	4·02
34 ÷ 100	0·34
10.7 ÷ 100	0·107
608 ÷ 1000	6·08
1035 ÷ 1000	1·035
5.6 ÷ 8	0·7
10.25 ÷ 5	2·05
0.636 ÷ 6	0·106
4.77 ÷ 9	0·53
8.032 ÷ 8	1·004

J

Find the value of x.

$x + 7 = 24$	17
$5 + x = 32$	27
$x + 1.5 = 5$	3·5
$31 − x = 16$	15
$x − 6.3 = 10$	16·3
$10 × x = 25$	2·5
$x × 4 = 18$	4·5
$\frac{x}{10} = 0.6$	6
$9 + x = 7 × 7$	40

A

70 p	=	£ 0·70
2 p	=	£ 0·02
£0·63	=	63 p
£0·19	=	19 p
£0·04	=	4 p
£1·37	=	13 TENS 7 p
£3·09	=	30 TENS 9 p
£10·80	=	108 TENS 0 p

7 TENS + 6 TWOS — 82 p
3 FIFTIES + 9 FIVES — £1·95
3 TENS + 5 FIVES + 9p — 64 p
£0·85 = 5 TENS + FIVES — 7
£0·68 = 12 FIVES + pence — 8
£2·30 = 3 FIFTIES + TENS — 8

B

9 p + 3p + 17p — 29 p
15p + 8 p + 6 p — 29 p
14p + 7 p + 12p — 33 p
5p + 11p + 15p + 4p — 35 p
6 p + 19p + 21p + 18 p — 64 p
37p + 85p — £1·22
£1·03 + 49p — £1·52
£2·57 + £0·60 — £3·17

43p − 19 p — 24 p
95p − 18p — 77 p
£1·10 − 84p — 26 p
£1·70 − 93p — 77 p
£2·30 − £0·80 — £1·50
£2·06 − £1·40 — 66 p

C

Find the cost of
10 @ 15 p each — £1·50
100 @ 3 p each — £3
9 @ 13p each — £1·17
8 @ 27 p each — £2·16
5 @ 45p each — £2·25
19 @ 4p each — 76 p
27 @ 7p each. — £1·89

Find the cost of 1 when
10 cost £2·70 — 27 p
100 cost £5 — 5 p
6 cost 84p — 14 p
4 cost £0·72 — 18 p
7 cost £2·24 — 32 p
9 cost £3·06. — 34 p

D Find the change from

1 TEN after spending (a) 3 p — 7 p | (b) 1 p — 9 p
3 TENS after spending (a) 22p — 8 p | (b) 20 p — 10 p
1 FIFTY after spending (a) 37p — 13 p | (b) 19 p — 31 p
(c) 26p — 24 p | (d) 5 p — 45 p
£1 after spending (a) 81p — 19 p | (b) 66 p — 34 p
(c) 45p — 55 p | (d) 7 p — 93 p
£5 note after spending (a) 73p — £4·27 | (b) £4·09 — 91 p
(c) £2·54 — £2·46 | (d) £1·98 — £3·02

E Make up the given amounts using the least number of coins. The first one is done for you.

AMOUNT	50p	10p	5p	2p	1p
23p		2		1	1
39p		3	1	2	
67p	1	1	1	1	
78p	1	2	1	1	1
86p	1	3	1		1
94p	1	4		2	

F

84 cm	=	0·84 m
309 cm	=	3·09 m
1075 mm	=	1·075 m
2305 mm	=	2·305 m
750 mm	=	0·750 m
100 m	=	0·1 km
925 m	=	0·925 km
1605 m	=	1·605 km
860 g	=	0·860 kg
1400 g	=	1·4 kg
700 ml	=	0·7 l
3310 ml	=	3·310 l

G

20.4 cm	=	204 mm
1.5 m	=	1500 mm
2.65 m	=	2650 mm
0.85 m	=	85 cm
8.37 km	=	8370 m
0.6 km	=	600 m
10.075 km	=	10075 m
1.325 kg	=	1325 g
0.05 kg	=	50 g
3.72 kg	=	3·720 g
1.3 l	=	1300 ml
4.25 l	=	4250 ml

H Find the cost of

500 g @ 76p per kg — 38 p
100 g @ 50p per kg — 5 p
250 g @ 40p per kg — 10 p
200 g @ £1·20 per kg — 0·24 p
1.5 kg @ 64p per kg — 96 p
100 g @ 45p per ½ kg — 9 p
300 g @ £1·10 per ½ kg — 66 p
25 cm @ 88p per m — 22 p
10 cm @ £3·50 per m — 35 p
60 cm @ £2·20 per m — £1·32
1.3 l @ 60p per l — 78 p
800 ml @ 50p per l. — 40 p

I How many

min in ¾ h — 45
min in 1¼ h — 75
s in 5 min — 300
weeks in 1 year — 52
days in 1 year — 365
days in April — 30
days in July — 31
days in October? — 31

J Change to 24-hour clock times.

7.35 a.m. — 07:35
12.05 p.m. — 12:05
3.27 p.m. — 15:27
10.55 p.m. — 22:55

Change to 12-hour clock times.
Use a.m. or p.m.
09.20 — 9·20 am
14.56 — 2·56 pm
00.35 — 12·35 am
21.16 — 9·16 pm

K Find the period of time between

8.35 a.m. and 10.16 a.m. — 1 h 51 min
5.25 a.m. and noon — 6 h 35 min
4.30 p.m. and 7.20 p.m. — 2 h 50 min
11.35 and 14.15 — 2 h 40 min
03.40 and 06.10. — 2 h 30 min

How many days inclusive
from 28th Jan. to 9th Feb. — 13
from 17th May to 5th June — 19
from 26th Nov. to 3rd Jan.? — 39

A Fill in the missing numerator or denominator.

$\frac{3}{4} = \frac{12}{16}$; $\frac{2}{3} = \frac{8}{12}$; $\frac{7}{8} = \frac{21}{24}$; $\frac{5}{6} = \frac{15}{18}$; $\frac{4}{5} = \frac{40}{50}$; $\frac{3}{10} = \frac{30}{100}$

Reduce each fraction to its lowest terms.

$\frac{9}{12} = \frac{3}{4}$; $\frac{12}{18} = \frac{2}{3}$; $\frac{20}{25} = \frac{4}{5}$; $\frac{24}{30} = \frac{4}{5}$; $\frac{70}{100} = \frac{7}{10}$; $\frac{45}{100} = \frac{9}{20}$

Change each improper fraction to a mixed number.

$\frac{19}{4} = 4\frac{3}{4}$; $\frac{31}{5} = 6\frac{1}{5}$; $\frac{43}{8} = 5\frac{3}{8}$; $\frac{29}{6} = 4\frac{5}{6}$; $\frac{77}{10} = 7\frac{7}{10}$; $\frac{40}{3} = 13\frac{1}{3}$

Change each mixed number to an improper fraction.

$7\frac{3}{4} = \frac{31}{4}$; $8\frac{2}{3} = \frac{26}{3}$; $5\frac{4}{5} = \frac{29}{5}$; $9\frac{7}{10} = \frac{97}{10}$; $4\frac{7}{8} = \frac{39}{8}$; $10\frac{5}{6} = \frac{65}{6}$

B Write as a fraction in its lowest terms.

50 of 75 $\frac{2}{3}$
30p of £1·00 $\frac{3}{10}$
25 cm of 1 m $\frac{1}{4}$
12 kg of 30 kg $\frac{2}{5}$
70 of 100 $\frac{7}{10}$
800 g of 1 kg $\frac{8}{10}$
400 ml of 2 ℓ $\frac{1}{5}$
45 of 100 $\frac{9}{20}$

C Find

$\frac{3}{5}$ of 70 42
$\frac{5}{8}$ of 64 40
$\frac{7}{10}$ of £1·20 84 p
$\frac{5}{6}$ of 42 ℓ 35 ℓ
$\frac{4}{7}$ of 350 g 200 g
$\frac{13}{100}$ of £1·00 13 p
$\frac{2}{3}$ of 1200 800
$\frac{35}{100}$ of 1 kg. 350 g

D Find the whole when

$\frac{1}{6}$ is 35 210
$\frac{3}{4}$ is 27p 36 p
$\frac{4}{5}$ is 36 cm 45 cm
$\frac{7}{10}$ is £1·40 £2·00
$\frac{2}{3}$ is 800 g 1200 g
$\frac{5}{9}$ is 5000 9000
$\frac{3}{8}$ is 24 ℓ 64 ℓ
$\frac{9}{20}$ is £1·80. £4·00

E Write as percentages.

(a) 33 out of 100 33 %   (b) 87 out of 100 87 %   (c) 9 out of 100 9 %   (d) 45 out of 100 45 %
(a) 0.65 65 %   (b) 0.38 38 %   (c) 0.75 75 %   (d) 0.3 30 %
(a) $\frac{29}{100}$ 29 %   (b) $\frac{56}{100}$ 56 %   (c) $\frac{1}{100}$ 1 %   (d) $\frac{13}{100}$ 13 %

Change each fraction first to hundredths, then write it as a percentage.

(a) $\frac{19}{50} = \frac{38}{100} = 38$ %   (b) $\frac{3}{25} = \frac{12}{100} = 12$ %   (c) $\frac{13}{20} = \frac{65}{100} = 65$ %

(a) $\frac{3}{4} = \frac{75}{100} = 75$ %   (b) $\frac{4}{5} = \frac{80}{100} = 80$ %   (c) $\frac{7}{10} = \frac{70}{100} = 70$ %

Fill in the blank spaces in each of the columns marked a–m. The first is done for you.

	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)
VULGAR FRACTION (LOWEST TERMS)	$\frac{1}{2}$	$\frac{1}{4}$	$\frac{3}{4}$	$\frac{1}{5}$	$\frac{2}{5}$	$\frac{3}{5}$	$\frac{4}{5}$	$\frac{1}{10}$	$\frac{3}{10}$	$\frac{7}{10}$	$\frac{9}{10}$	$\frac{1}{20}$	$\frac{1}{100}$
DECIMAL FRACTION	0.5	0.25	0·75	0·2	0.4	60	0.8	0·1	0.3	0·7	0.9	0·05	0.01
PERCENTAGE	50%	25 %	75%	20 %	40 %	60%	80 %	10 %	30 %	70%	90 %	5 %	1 %

F Find the value of

25% of 120 30
50% of 35 17·5
75% of 400 300
10% of 1000 100
30% of 90 27
70% of 200 140
90% of 160 144
20% of 95p 19 p
40% of £20 £8
60% of £15. £9

G Find the value of

50% of 12p 6 p
20% of £6·50 £1·30
100% of 93 p 93 p
10% of 2.5 kg 250 g
5% of 4 ℓ 200 ml
30% of 2 m 60 cm
1% of £1·00 1 p
7% of £1·00 7 p
3% of £3·00 9 p
12% of £9·00. £1·08

H Find as a percentage

6 of 24 25 %
7½ of 15 50 %
40p of 50p 80 %
93p of 93p 100 %
200 g of ½ kg 40 %
700 ml of 1 ℓ 70 %
25p of £2·50 10 %
£1·50 of £2·00 75 %
7p of £1·00 7 %
30 cm of 1·5 m. 20 %