**Answer** 

### **Answer**

1  $5.305 = 5 + \frac{1000}{1000}$ 

2 10% of sixteen thousand =

- 3 + 4.375 kg = g
- $4 ext{ } ext{f2} (27p + 65p) = ext{f}$
- 5 2l 450ml 0.5l = ml
- $6 \quad 0.4 + = 0.476$
- 7 £1.76 × 5 =
- $8 \quad 0.75 \text{km} = \text{m} + 325 \text{m}$
- $9 \frac{x}{100} = 13.07 \text{ Find } x$
- 11 a 10% of £20.40 =
- $\frac{1}{6}$  of 45cm = mm

В

1000

m

1 By how many thousandths is 1.057 less than 2?

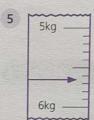
thousandths

By how many degrees is the reflex angle at O greater than the obtuse angle at 0?

- 3 Ellie spends  $\frac{1}{2}$  of her money on bus fares and  $\frac{5}{12}$  on sweets. What fraction of her money is left?
- 4 A cyclist travelled at 24 km/h for  $\frac{1}{4}$  hour. How far did she travel?

km

g



Read as accurately as possible the mass shown by the pointer. Write the answer in grams.

- 6 The population of Town A is a quarter of a million. The population of Town B is fifty thousand less than Town A. What is the population of Town B?
- 7 How much change is there out of £15 after spending £9.50 and £3.20? £
- 8 Write these decimals in ascending order.

5.03 0.35 0.5 3.05

- 9 A bus runs at intervals of 25 min. What are the times of the next two buses after 08:15?
- 10 Buy today for £60 or pay 10% weekly for 12 weeks

mm

%

By how much is it cheaper to pay today? £

11 A rectangular path is 9m long and 80cm wide. Find its area in m2.

12 Ravi is given £85 as birthday gifts. He spends 30% and saves the remainder.

- a What percentage does he save?
- % b How much money does he spend? b f

11 What percentage of 2l is

9 By how many millimetres is 95.4cm

10 Find the least number of pennies

which must be added to 92p to make the amount exactly divisible by 6.

> Find the volume of the box in cm<sup>3</sup>

cm<sup>3</sup>

b  $5\frac{5}{6}$  as an improper fraction. b 4 What is the cost of 400g at £1.50 per ½kg? 5 By how many is 450 × 1000 less than ½ million? 6 By how many degrees does the temperature fall from 8°C to -5°C? 7 25% of Max's money is £35 Find the whole amount. 8 Approximate to the nearest whole number.

a 79.63

b 12.475

a 400ml

b 100ml?

12

less than 1m?

100 10 38min + 2h + 47min = h min h min a £ b  $2\frac{1}{2}$ % of £20.40 = bf mm **Answer** 1 Which of these numbers are factors of 75? 5 6 3 7 9 2 Find the mean of 3, 1.4, 2 and 2.6 3 Write a  $\frac{47}{8}$  as a mixed number

A		Answer	
1	Write in digits six hundred and two thousand five hundred and eight.		
2	£0.27 × 40 =	£	
3	$\frac{2}{3}$ of 960 =		
4	a 1% of £17 = p	a	p
	b 7% of £17 = £	b f	
5	10.06 = thousandths	thou	sandths
6	£2.30 = three 50ps + two 20ps + 10ps		10ps
7	$3\frac{3}{4} \times 4 =$		
8	180° - (72° + 36°) =		c
9	300g + 450g + 350g = kg		kg
10	2h 15min – 50min = h min	h	min
11	27cm × 7 = m cm	m	cm

III	2/CIII x / =   III   CIII	m	cm
12	$\frac{\text{£}16.56}{8} =$	f	
В		Answer	
1	By how many is 0.3 million less than $\frac{1}{2}$ million?		
2	What length in metres is 6 times 7m 30cm?		m
3	How many times is $2\frac{1}{2}$ contained in 50?		
4	Find the total of 17p, 53p, 24p and 7p Write the answer in £s.	· f	
5	Write the 24-hour clock time which is 7h before 4.35 a.m.		
6	What fraction in its simplest form is equal to		
	a 8%	a	
	b 35%?	b	
7	By what quantity is 920ml less than 1.2l?		ml

8 Increase £30.50 by 10%.

4.7km

per metre.

9 If the distance from A to D is 14km, find the distance from B to C.

В

11 The perimeter of a rectangle is 65cm. Its length is 24cm. Find its width.

12 10 doughnuts cost £2.09. Find the

cost of one to the nearest penny.

10 Find the cost of 0.3m at £4.80

		SECTION	3	Test 10
C			Answ	er
1	How many envelopes each can be bought for	costing 3p		
2	ABCD is a parallelogra		rees	
	A	B a ∠ BAD	a	0
	/ ~/	b ∠ ABC.	14	0
	D (140°)	D Z ABC.	Ь	
3	Share £5 between Her so that Henry has 6p e has 4p. How much do	each time Amy		
	Henry		£	
400	Amy		£	
4	A man walked steadily 11.00 a.m. to 2.30 p.m he walk?	at 4km/h fron n. How far did	n	km
5	From the largest of the fractions take the small			
	0.33 0.3 0.03 0	.333		
6	1cm³ or 1ml of water h A jar holds 3½ l of water		g.	
	a the volume of water	in cm³	а	cm <sup>3</sup>
	b the mass of the water	er in ka.	b	kg
7	How much is saved by at 16p per kilogram, insame mass at 9p per $\frac{1}{2}$	buying 15kg stead of the		р
8	Date of birth	Find the		
	Riaz 1.3.96	age on 1		
	Sophie 1.10.94	September 2010 in years		
		and months o	of	
	a Riaz	a	yr	mth
	b Sophie.	b	yr	mth
9	The area of a hall is 600 lts length is 8m. Find	m².		
	a its width		a	
	b its perimeter.		b	
10	/ of	that fraction the cumference		
	120° of	the circle		
	A B is	the arc AB?	a	
	b If the circumference 188.4cm, find in mill length of the arc.		b	mm
11	Cheese costs £2.60 per	½ka Find		
(11)	the mass in kilograms a of cheese which costs £	nd grams	kg	9
12	Box A measures 8cm lo 4cm high. Box B measu $5\frac{1}{2}$ cm wide, 6cm high. I	res 10cm long,		

difference in their volumes.

km

cm

P

C 2.25km D

mm

kg

kg

mm

a

b

b

a

b cement.

## **Answer**

- 1  $10 \times 10 \times 10 \times 10 \times 10 =$
- $267p \times 6 = f$
- 3(49+8)=100-
- 4 90% of £300 =
- 5 5l ÷ 8 = ml
- $6 \quad 10 7\frac{3}{10} =$
- $7 \quad 0.246 = 2 \text{ tenths} + \text{ thousandths}$
- 8 a  $\frac{3}{25}$  = \%
- b 0.07 = %
- 9 1.25 kg 600g = g
- 10 nine 5ps + three 2ps + three 20ps
- 11  $\frac{3}{4}$  of 3.6cm = mm
- 12 2h 49min + 53min = h min

### **Answer**

h

a

b

£

ml

%

%

g

mm

min

days

thousandths

- 1 By how many is 90 200 less than one hundred thousand?
- 2 Find the total number of days in February, March and April in
- a leap year.

B

3

72°

How many degrees in the reflex angle AOB?

- 4 Find the cost of 90cm of cloth at £3.70 per metre.
- 5 How many times is 400g contained in 2.4kg?
- 6 Of these numbers which is the smallest?

### 1.11 1.01 1.111 1.1

- 7 What is the difference in millilitres between 2.8l and 3.7l?
- 8 Write as a fraction in its lowest terms.
  - a £4.50 of £18
  - b 5min of 1h
- 9 A strip of plastic 4m 200mm long is cut into seven equal pieces. Find in millimetres the length of each piece.
- 10 Approximate
  - a £29.50 to the nearest £
  - b  $\frac{99}{2}$ p to the nearest 1p.

а

b

mm

mm

- 9 3 p Find the sum of money which was divided by 5. f
- 12 The diameters of two circles are 9.4cm and 15.8cm. What is the radius of each circle in millimetres?

- **Answer**
- 1 Which numbers below 50 have both 2 and 7 as factors?
- 2 What is the date of the third Wednesday in July if 1 July is a Sunday?

3	June	July	Aug	Sept	The monthly rainfall is
	40mm	23mm	42mm	35mm	given in

millimetres. Find the mean rainfall for all four months.

- 4 60kg of mortar is mixed from 4 parts of sand and 1 part of cement. Find the mass used of a sand
- 5 Write this number in words.  $(7 \times 10^3) + (1 \times 10^2) + (9 \times 10)$
- 6 How many degrees are there in a turn from W to SE
  - a clockwise
  - b anticlockwise.

7

The diameter of circle A is 9.4cm. The diameter of circle B is 5.8cm.

How far apart are the two centre points in millimetres?

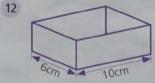
- 8 a Find the area of a square with 5cm sides.
  - b How many times greater is the area of a square with sides double that length?
- 9 Stickers 7p each or 6 for 40p

How much money is saved by buying 24 stickers in groups of six?

10

AB and CD are parallel lines. Find a angle x

- b angle y.
- 11 Grace won a prize of £800 which she deposited in a bank at an interest rate of 5%. How much interest did she receive at the end of 1 year?



- a How many cm cubes can be fitted into the bottom of the box?
- b If the volume of the box is 240cm³, find its height.
- cm

4	Answe

1	55 + 1	7 =	× 9

$$5 \quad 380g \times 9 = kg \qquad kg$$

$$8 \frac{1}{2} + \frac{3}{8} + \frac{3}{4} =$$

$$9 2.05l + ml = 2\frac{1}{2}l$$

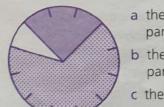
9 
$$2.05l + ml = 2\frac{1}{2}l$$
 ml  
10  $360^{\circ} - (75^{\circ} + 80^{\circ} + 130^{\circ}) -$ 

10 
$$360^{\circ} - (75^{\circ} + 80^{\circ} + 130^{\circ}) =$$
  
11  $\frac{5}{6}$  of £90 =

### В **Answer**

1 Which of the numbers are multiples of 4, 6 and 9?

- 2 How many kilometres are there in seventeen hundred metres?
- 3 Decrease €44 by 10%. €
- 4 How many hours and minutes from 09:48 to 11:19? min
- 5 What fraction in its simplified form is



a the patterned part |

a

a

- b the shaded part |
- c the unshaded part?
- 6 Find the cost of 2.25l at 28p per litre.
- 7 How many biscuits each costing 7p are bought for £2.73?
- 8 Write each score as a percentage.
  - a 18 out of 20
  - b 35 out of 35
- 9 Five oranges cost 80p. What fraction of 80p will three oranges cost?
- 10 By how many is 300 050 greater than  $\frac{1}{4}$  million?
- 11 Find  $\frac{1}{5}$  of £1.68 to the nearest penny
- 12 Find in cm³ the volume of a box 15cm by 10cm by 7cm.

SECTION 3 | Test 12

**Answer** 

## 1 Find the missing numbers in

0.125, 0.25, 0.375, ,

this sequence.

C

5ps

km

%

%

p

 $cm^3$ 

9

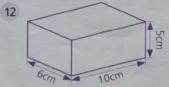
- 2 What number when added to 48 three times gives a total of 120?
- 3 A fruit cake has a mass of 1.5kg. If 40% of the mass is fruit, find the mass of the fruit in grams.
- 4 A line 8cm long is drawn to the scale 1mm to 0.1m. What length does the line represent?
- 5 Which of these fractions is less than  $\frac{1}{4}$ ?

1

- 6 A snow removal vehicle spreads grit at the rate of 125g per 1m2. How many kilograms are required to grit a path 50m<sup>2</sup>?
- 7 How far will a cyclist travel in \( \frac{1}{4} \) hour if he cycles at 18 kilometres per hour?
- 8 The length of a rectangle is three times its width. If the perimeter is 192cm find
  - a the length
  - b the width of the rectangle.
    - O is the centre of the circle the radius of
      - centre AOB
  - b the length of the straight line AB.
- 10 Of 150 children in a school 60 can swim one width of the pool and 45 can swim one length of the pool. What percentage of the children can swim
  - a the width

b the length?

- 11 Seven children shared a money prize
- equally. Each child received £42 and there was £6 left. Find the total value of the prize.



The drawing shows a volume.

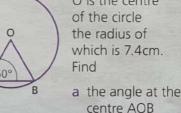
m

g

kg

km

b



- b cm

  - b



		. 01	1121	1 1
A	5 +	6 =		
	8 +	8 =		
	0 +	7 =		
	7 +	8 =		
	4 +	7 =		
	18 +	9 =		
	15 +	8 =		
	3 + 2	29 =		

7 + 36 =

14 + 19 =

12 - 5 =

9 - 0 =

11 - 3 =

14 - 5 =

15 - 9 =

24-6=

26 - 9 =

32 - 8 =

58- 9=

47 - 20 =

54 ÷ 9 =

7 ÷ 7 =

42 ÷ 7 =

81 ÷ 9 =

36 ÷ 4 =

63 ÷ 9 =

56 ÷ 8 =

$(6 \times 6) + 5 =$	
$(9 \times 1) + 7 =$	
$(5 \times 8) + 4 =$	
$(8 \times 0) + 6 =$	
$(10 \times 5) + 8 =$	
$(8 \times 8) + 6 =$	
$(3 \times 3) + 2 =$	
$(9 \times 8) + 7 =$	
$(4 \times 9) + 5 =$	
$(7 \times 6) + 3 =$	
29÷3=	r
67÷8=	r
21 ÷ 4 =	r
6 ÷ 7 =	r
39÷5=	r

r

r

	27 × 8 =	
	49 × 6 =	
	107 × 7 =	
	93 × 10 =	
	180 × 10 =	
	95 × 20 =	
	86 × 40 =	
	100 × 80 =	
	98 × 100 =	
	204 × 100 =	
	102 ÷ 3 =	ALE I
1	336 ÷ 4 =	
	648 ÷ 6 =	
	590 ÷ 10 =	
	800 ÷ 10 =	
	540 ÷ 20 =	
	420 ÷ 60 =	
	1050 ÷ 50 =	
ı	4000 ÷ 100 =	
1	2900 ÷ 100 =	
	low many tonths	aual

_	
)	Write these numbers.
	Fifty thousand and seven
	Sixty-two thousand four hundred and two
	One hundred and forty thousand and eleven
	Two hundred and six thousand and nine _
	30000 + 400 + 6 =
	100000 + 7000 + 50 + 8 =
1	$(4 \times 1000) + (6 \times 100) + (3 \times 10) + 8 =$
-	$(9 \times 1000) + (7 \times 10) + 5 =$
1	$(3 \times 1000) + (4 \times 10) =$
	1 million
	1½ million
(0) (0)	1 million
7 4	2.7 million

0	Write as decimals.
	201 tenths
	4 hundredths
	309 hundredths
	580 hundredths
	603 thousandths
	75 thousandths
	3009 thousandths
	$9 + \frac{3}{10} + \frac{8}{100} =$
	$10 + \frac{7}{100} + \frac{2}{1000} = $
	5 tenths +
	2 hundredths =
	17 hundredths and 6 thousandths =

70 ÷ 9 =

51 ÷ 6 =

 $13 \div 7 =$ 

52 ÷ 5 =

4 ÷ 9 =

•	
	How many tenths equa
	6.8
	14.9
	30.4?
	How many
	hundredths equal
	0.93
	7.05
	3.2?
	How many
	thousandths equal
	0.003
	0.078
	1.52
	2.8
	4.09?

2.5 + 1.54 =	
0.06 + 1.04 =	
3.7 + 0.35 =	
0.28 + 1.625 =	
2 - 1.4 =	
2- 1.4=	
1.4 - 0.9 =	
10 - 8.75 =	
4.8 - 3.76 =	
0.7 - 0.58 =	

6.45 ×	10 =	
0.873	× 10 =	
2.03 ×	100 =	
0.092	× 100 =	1
1.64 ×	1000 =	
0.053	× 1000 =	
1.8 × 5	i =	
4 × 1.6	3 =	
0.09 ×	8 =	
7 × 2.0	8 =	
1.063	× 6 =	

/9 ÷ 10 =
40.2 ÷ 10 =
34 ÷ 100 =
10.7 ÷ 100 =
608 ÷ 1000 =
1035 ÷ 1000 =
5.6 ÷ 8 =
10.25 ÷ 5 =
0.636 ÷ 6 =
4.77 ÷ 9 =
8.032 ÷ 8 =

B F	find the value of x.
X	( + 7 = 24
5	5 + x = 32
X	+ 1.5 = 5
3	1 - x = 16
X	- 6.3 = 10
1	$0 \times x = 25$
X	× 4 = 18
7	$=\frac{x}{5}$
X 10	5 = 0.6
9	$+x=7\times7$

## CHECK-UP TEST | Number

A Fill in the missing numerator or denominator.

$$\frac{3}{4} = \frac{3}{16}$$

$$\frac{2}{3} = \frac{8}{3}$$

$$\frac{7}{8} = \frac{}{24}$$

$$\frac{5}{6} = \frac{18}{18}$$

$$\frac{4}{5} = \frac{40}{}$$

$$\frac{3}{10} = \frac{30}{10}$$

Write each fraction in its simplest form.

$$\frac{9}{12} = \frac{12}{18} = \frac{1}{18}$$

$$\frac{20}{25} =$$

$$\frac{70}{100} =$$

$$\frac{45}{100} =$$

Change each improper fraction to a mixed number.

$$\frac{31}{5} =$$

$$\frac{43}{8} =$$

$$\frac{77}{10} =$$

$$\frac{40}{3} =$$

Change each mixed number to an improper fraction.

$$7\frac{3}{4} =$$
\_\_\_\_

$$7\frac{3}{4} =$$
  $8\frac{2}{3} =$   $5\frac{4}{5} =$ 

$$5\frac{4}{5} =$$

$$9\frac{7}{10} =$$

$$4\frac{7}{8} =$$

$$10\frac{5}{6} =$$

%

%

%

%

%

%

%

%

%

Write as a fraction in its simplest form.

50 of 75
30p of £1.00
25cm of 1m
12kg of 30kg
70 of 100
800g of 1kg
400ml of 2l

C Find  $\frac{3}{5}$  of 70  $\frac{5}{8}$  of 64

 $\frac{7}{10}$  of £1.20  $\frac{5}{6}$  of 421 4 of 350g

 $\frac{13}{100}$  of £1.00 of 1200  $\frac{35}{100}$  of 1kg.

Find the whole when  $\frac{1}{6}$  is 35

 $\frac{3}{4}$  is 27p p  $\frac{4}{5}$  is 36cm cm  $\frac{7}{10}$  is £1.40  $\frac{2}{3}$  is 800g g  $\frac{5}{9}$  is 5000  $\frac{3}{8}$  is 241

Write as percentages.

45 of 100

а	33	out	of	100	

a 0.65

b 
$$0.38$$
 b  $\frac{56}{100}$ 

 $\frac{9}{20}$  is £1.80

d 45 out of 100

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

$$a \frac{19}{50} = \frac{}{100} = \frac{}{}$$
%

$$b \frac{3}{25} = \frac{3}{100} = \frac{\%}{100}$$

$$c \frac{13}{20} = \frac{}{100} = \frac{}{}\%$$

$$a \frac{3}{4} = \frac{3}{100} = \frac{\%}{100} = \frac{100}{100} = \frac{\%}{100}$$

$$\frac{4}{5} = \frac{9}{100} = \frac{9}{100}$$

$$c_{\frac{7}{10}} = \frac{7}{100} = \frac{\%}{100}$$

Fill the blank spaces in each of the columns. The first is done for you.

	а	b	C	d	е	f	9	h	i	j	k		m
Fraction in its simplest form	1/2			1 5				1 10				1 20	
Decimal fraction	0.5	0.25			0.4		0.8		0.3		0.9		0.01
Percentage	50%	%	75%	%	%	60%	%	%	%	70%	%	%	%

Find the value of 25% of 120

50% of 35

75% of 400 10% of 1000

30% of 90 70% of 200

90% of 160 20% of 95p

40% of £20 60% of £15. Find the value of 50% of 14p

20% of £6.50 100% of 93p 10% of 2.5kg

5% of 41 30% of 2m 1% of £1.00

7% of £1.00 3% of £3.00

12% of £9.00.

p q ml cm p p p

p

Find as a percentage 6 of 24

 $7\frac{1}{2}$  of 15 40p of 50p 93p of 93p 200g of 1 kg 700ml of 11

25p of £2.50 % £1.50 of £2.00 % 7p of £1.00 % 30cm of 1.5m.

A	70p =	£		
	2p =	£		
	f0.63 =			р
	f0.19 =			p
	£0.04 =			p
	£1.37 =		10ps	р
	f3.09 =		20ps	р
	£10.80 =		10ps	р
	seven 10ps + six 2ps =			p
	three 50ps + nine 10ps =	£		
	three 10ps + five 5ps + 9p =			p
	£0.85 = five 10ps + 5ps =			5ps
	£1.20 = twelve 5ps + 20ps	=	20	ps
	£2.30 = three 50ps + 20ps	=	20	ps
				12.72

B	9p + 3p + 17p =		P
	15p + 8p + 6p =		p
	14p + 7p + 12p =		p
	5p + 11p + 15p + 4p =		p
	6p + 19p + 21p + 18p =		p
	37p + 85p =	£	
	£1.03 + 49p =	£	
	£2.57 + £0.60 =	£	
	43p - 19p =		р
	95p - 18p =		р
	£1.10 - 84p =		p
	£1.70 - 93p =		p
	f2.30 - f0.80 =	£	
	f2.06 - f1.40 =		р

9	Find the cost of		
	10 at 15p each	£	
	100 at 3p each	£	
	9 at 13p each	£	
	8 at 27p each	£	
	5 at 45p each	£	
	19 at 4p each		р
	27 at 7p each.	£	
	Find the cost of	1 wh	ien
	10 cost £2.70		р
	100 cost £15		р
	6 cost 84p		р
	4 cost £0.72		p
	7 cost £2.24		р
	9 cost £3.06.		р
			_

0	Find the change from	1						
	20p after spending	а	3р		р	b	8p	p
	20p after spending	a	12p		р	b	14p	р
	50p after spending	а	37p		р	b	19p	р
		C	26p		р	d	5p	p
	£1 after spending	а	81p		р	b	66p	р
		C	45p		р	d	7p	р
	£5 after spending	а	73p	£		b	£4.09	p
		C	£2.54	£		d	f1.98 f	

Amount	50p	20p	10p	5p	2p	1p
23p		1			1	1
39p						
67p						
78p						
86p					218 70	
94p				100		

a	84cm =	m
	309cm =	m
	1075mm =	m
	2305mm =	m
	750mm =	m
	100m =	km
	925m =	km
	1605m =	km
	860g =	kg
	1400g =	kg
	700ml =	1
	3310ml =	l

G	20.4cm =	mm
	1.5m =	mm
	2.65m =	mm
	0.85m =	cm
	8.37km =	m
	0.6km =	m
	10.075km =	m
	1.325kg =	g
	0.05kg =	g
	3.72kg =	g
	1.3l =	ml
	4.25l =	ml

D	Find the cost of		
	500g at 76p per kg		р
	100g at 50p per kg		р
	250g at 36p per kg		р
	200g at £1.20 per kg		р
	1.5kg at 64p per kg		р
	100g at 45p per ½kg		р
	300g at £1.10 per ½kg		р
	25cm at 92p per m		р
	10cm at £3.50 per m		р
	60cm at £2.20 per m	£	
	1.3l at 60p per l		р
	800ml at 50p per l		р

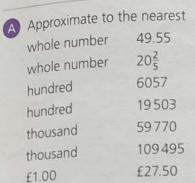
0	How many	
	min in $\frac{3}{4}$ h	min
1	min in $1\frac{1}{4}$ h	min
5	seconds in 5min _	S
1	weeks in 1 year	wk
(	days in 1 year	d
(	days in April	d
(	days in July	d
(	days in October?	d

Change to 24-hour clock times.
7.35 a.m.
12.05 p.m.
3.27 p.m.
10.55 p.m.
Change to 12-hour clock times. Use a.m. or p.m.
09:20
14:56
00:35
21:16

K Find the period of time be	tween	
8.35 a.m. and 10.16 a.m.	h	min
5.25 a.m. and noon	h	min
4.30 p.m. and 7.20 p.m.	h	min
11:35 and 14:15	h	min
03:40 and 06:10.	h	min
How many days inclusive		
from 28 Jan to 9 Feb		d
from 17 May to 5 June		d
from 26 Nov to 3 Jan?		d

## Mental Arithmetic 4

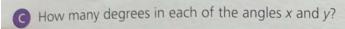
## CHECK-UP TEST | Measurement and geometry

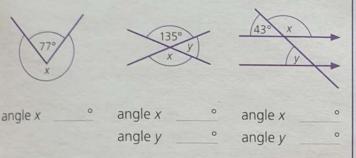


thousand	109493
£1.00	£27.50
Find to the nearest	penny.

		The same of the sa
	£	
	L	
97p		
9/0		р
-		D
		100

B Approximate to	the nearest	
metre	8m 59cm	m
metre	19m 700mm	m
kilogram	16kg 50g	kg
kilogram	7.55kg	kg
½kg	9kg 800g	kg
$\frac{1}{2}$ kg	6.55kg	kg
litre	39.871	1
b ½ of £2.50	D 6 £3.35	

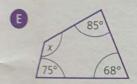




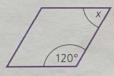
 $a \frac{1}{10}$  of

D	Find the missing angle in each of the triangles. The name each triangle according to	ien
	a the angles b the sides.	

Angl trian			a Name of triangle (angles)	b Name of triangle (sides)
32°	0	90°		
46°	52°	0		
60°	0	60°		
0	125°	38°		
57°	57°	0		



Find the angle x in



a the rhombus

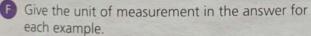
c the parallelogram



b the trapezium

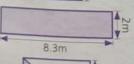
d the irregular quadrilateral

130°

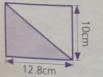




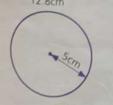
perimeter of square area of square



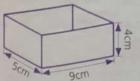
perimeter of rectangle area of rectangle



area of triangle



diameter of circle

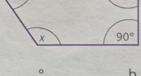


How many cm cubes

a fit into the bottom of the box

b

b fill the box?



Write the missing measurement in each of the rectangles.

Area	50m²		25cm <sup>2</sup>	16m²
Length		13.5cm		
Breadth	10m	9cm	2.5cm	50cm

Write the missing measurement in each of the triangles.

Base	16cm	45m	10cm	
Height	8cm	12m	S PARTY	7cm
Area	- Service of		90cm <sup>2</sup>	42cm²

Write the missing radius or diameter

Radius	15.3cm			27.6cm
Diameter		36mm	9.8cm	

Find the volume of each of these boxes. length 13cm, breadth 8cm, height 2cm length 7cm, breadth 4cm, height 2.5cm cube of 6cm side

_			
Α			-
^		A	ANSWER
1	5.305 = 5 + 1000		305
2	1% of sixteen thousand		1000
3	4.375 kg = g		4375 g
4	£2 - $(27p + 65p) = £$		£ 1.08
5	$2 \ell 450 \text{ m}\ell - 0.5 \ell = \text{m}\ell$		1950 ml
6	0.4 + = 0.476		0.076
7	£1.76 × 5		£ 8.80
8	0.75 km = m + 325 m		425 m
9	$\frac{x}{100} = 13.07 \text{ Find } x.$		1307
10	38 min + 2 h + 47 min =		
	h min		25 min
11	(a) 10% of £20·40 (b) 2½% of £20·40		£ 2.04
12	$\frac{1}{6}$ of 45 cm = mm	(b)	£ 0.51 75 mm
			73 11111
В		A	NSWER
1	5 6 3 7	9	
	Which of these numbers are factors of	75?	3 5
2	Find the average of 3, 1.4, 2 and 2.		
3	Write (a) $\frac{47}{8}$ as a mixed number	(a)	5 <sup>7</sup> / <sub>8</sub>
	(b) $5\frac{5}{6}$ as an improper fraction	. <u>(b)</u>	35 <u>6</u>
4	What is the cost of 400 g at £1-50 per $\frac{1}{2}$ kg?		£ 1.20
5	By how many is $450 \times 1000$ less than $\frac{1}{2}$ million?		50 000
6	By how many degrees does the temperature fall from 8°C to -5°C	2	1396
7	25% of my money is £35. Find the		13°C
8	whole amount.  Approximate to the nearest whole	_	£ 140
	number (a) 79.63	<u>(a)</u>	80
9	(b) 12.475. By how many mm is 95.4 cm less	(b)	12
	than 1 m?	_	46 mm
10	Find the least number of pennies which must be added to 92p to make	e	
11	the amount exactly divisible by 6. What percentage of 2 litres is	-	4
	(a) 400 ml	<u>(a)</u>	20%
	(b) 100 ml?	<u>(b)</u>	5%
12	Tu .		
	Find the volume of the		
	8 cm 6 cm box in cm <sup>3</sup> .		240 cm <sup>3</sup>

le	est 9
C	ANSWER
1	By how many thousandths is 1.057 less than 2? 943 thousandth
2	By how many degrees is the reflex angle AOB greater than the obtuse angle AOB? 100°
3	A girl spends $\frac{1}{2}$ of her money on bus fares and $\frac{5}{12}$ on sweets.  What fraction of her money is left?
4	Find the distance travelled in 1 h 40 min at a speed of 90 km/h.  150 km
5	From the scale on the spring balance read as accurately as possible the mass shown by the pointer. Write the answer in g.  5 kg  From the scale on the spring balance read as accurately as possible the mass shown by the pointer. Write the answer in g.
6	The population of a town was a quarter of a million, reduced later by 4%. By how many was the population reduced?  10 000
7	How much change is there out of £15 after spending £9.50 and £3.20? £ 2.30
8	The total length of 5 laths is 16.25 m. Find in m and cm the length of 3 laths.  9 m 75 cm
9	A bus runs at intervals of 25 min. What are the times of the next two buses after 08.15?  09.05
10	CASH PRICE £60 or 10% WEEKLY FOR 12 WEEKS  By how much is it cheaper to pay cash? £ 12
11	A path is 9 m long and 80 cm wide. Find its area in m <sup>2</sup> .  7.2 m <sup>2</sup>

Ravi is given £13 as birthday gifts. He spends 9% and saves the remainder.

(a) What percentage does he save? (a)

(b) How much money does he

spend?

91%

(b) £ 1.17

		ANSWER	C	ANSWER
si	/rite in figures x hundred and two thousand five undred and eight.	602 508	1	How many articles costing 3p each can be bought for £2·40?
£	0·27 × 40	£ 10·80	2	A BCD is a parallelogram.
	f 960	640	0.	Find in degrees (a) ∠ BAD (a) 140°
	) 1% of £17	(a) 17p		C (b) ∠ ABC. (b) 40°
	o) 7% of £17	(b) £ 1·19	3	Share £5 between Josh and Amy so that Josh has 6p each time Amy has 4p.
		060 thousandths		How much does each have?  Josh £ 3 Amy £ 2
	2·30 = 3 FIFTIES + 2 TWENTIES + TENS	4 TENS	4	A motorist drives from Liverpool to
3 ×	4	15		Glasgow, a distance of 350 km, in 6 hours. Find to the nearest km his
80°	- (72° + 36°)	72°		average speed in km/h. 58 km/h
	0 g + 450 g + 350 g = kg	1.1 kg	5	0.33 0.3 0.03 0.333
1	h 15 min – 50 min =			From the largest of these decimal fractions take the smallest. 0.30
	h min	1h 25 min	6	1 cm³ or 1 mℓ of water has a mass of 1 gram.
	cm × 7 = _ m _ cm	<u>1m 89cm</u>		A jar holds $3\frac{1}{2}\ell$ of water. Find (a) the volume of water in cm <sup>3</sup> (a) 3500cm
1	<u>6·56</u> 8	£ 2·07		(b) the mass of the water in kg. (b) 3.5 kg
		ANSWER	7	How much is saved by buying 15 kg at 16p per kg instead of the same mass at 9p per $\frac{1}{2}$ kg?
	how many is 0.3 million less	200 000	8	Find the age on the Dates of birth
	n ½ million? at length in m is 6 times	200 000		1st Sept. 2010 in years and months Riaz 1.3.'96
	30 cm?	43.8 m		of Sophie 1.10.'94
	w many times is $2\frac{1}{2}$ contained in			(a) Riaz (a) 14 years 6 month
	d the total of 17p, 53p, 24p and rite the answer in £s.	7p. £ 1.01		(b) Sophie (b) 15 years 11 month
/r	ite the 24-hour clock time which	is	9	The area of a hall is 60 m². Its length is 8 m. Find (a) its width (a) 7.5 m
	pefore 4.35 a.m.	21.35		(b) its perimeter. (b) 31 r
	at fraction in its lowest terms is all to (a) 8% (b) 35%? (a)	$\frac{2}{25}$ (b) $\frac{7}{20}$	10	(a) What fraction of the circumference
	what quantity is 920 ml less in 1.2 litres?	280 ml		of the circle is the arc AB? (a)
ICI	rease £30·50 by 10%.	£ 33.55		B (b) If the circumference measures 188.4 cm,
		2.25 km D		find in mm the length of the arc.
				(b) 628 mn
	the distance from A to D is 14 km. nd the distance from B to C.	7.05 km	11	Meat costs £2·60 per ½ kg. Find the mass in kg and g of meat which
	nd the cost of 0.3 m at £4·80 r m.	£ 1.44		costs £7·80. 1kg 500g
	ne perimeter of a rectangle is 65 cm length is 24 cm. Find its width.	m. 8.5 cm	12	8 cm long, 9 cm wide, 4 cm high.  Box B measures
0	articles cost £2.09. Find the cost one to the nearest penny.	21p		10 cm long, $5\frac{1}{2}$ cm wide, 6 cm high. Find the difference in their volumes. 42 cm <sup>3</sup>

A		ANSWER	C	ANSWER
1	10 × 10 × 10 × 10 × 10	100 000	1	Find the numbers less than 50 of
2	67p × 6 = £	£ 4·02	2	which both 2 and 7 are factors. 14 28 42
3	(49 + 8) = 100 -	43	2	What is the date of the third Wednesday in July if the 1st of July is on
4	90% of £300	£ 270	1020	Sunday? 18th
5	5 litres + 8 =	625 ml	3	June July Aug Sept The monthly rainfall is given in mm.
6	$10 - 7\frac{3}{10}$	$2\frac{7}{10}$		40 mm 23 mm 42 mm 35 mm Find the average rainfall for
7	0.246 = 2 tenths + thousandth			the 4 months. 35 mm
8	(a) $\frac{3}{25} = 10\%$	46 thousandths (a) 12%	4	60 kg of mortar is mixed from 4 parts of sand and 1 part of cement.
	(b) 0.07 = %	(b) 7%		Find the mass used of
9	1.25 kg - 600 g = 11 g	650 g		(a) sand (a) 48 kg
10	9 FIVES + 3 TWOS			(b) cement. (b) 12 kg  Write this number in words.
11	+ 3 TWENTIES = £	£ 1.11	5	$(7 \times 10^3) + (1 \times 10^2) + (9 \times 10)$
12		27 mm		seven thousand one hundred and ninety
	2 11 42 11111 = N = M	n 3 h 42 min	6	How many degrees are there in a turn from W to SE (a) clockwise (a) 225°
P				// · · · · · · · · · · · · · · · · · ·
В		ANSWER	7	(b) anticlockwise? (b) 135°  Diameter of circle A
1	By how many is 90 200 less than			A B is 9.4 cm.
2	one hundred thousand? Find the total number of days in	9800		Diameter of circle B is 5.8 cm.
	February, March and April in a	20		How far apart are the two
3	leap-year.	90	8	centres in mm? 76 mm  (a) Find the area of a square of
	72° B How many degrees			5 cm side. (a) 25 cm <sup>2</sup>
	How many degrees the reflex angle AC			(b) How many times greater is the area of a square with sides double
				that length? (b) 4
4	Find the cost of 90 cm of cloth at £3.70 per m.		9	STICKERS How much money is
5	How many times is 400 g contained	£ 3.33		7p each saved by buying or 6 for 40p 24 stickers six
6	in 2.4 kg?  Of these numbers which is the smalle	6	10	at a time? 8p
	1.11, 1.01, 1.111, 1.1	1.01		Which triangle A or B has
7	What is the difference in ml between 2.8 l and 3.7 l?	000	,	the greater area
8	Write as a fraction in its lowest torms	900 ml	K	many cm <sup>2</sup> ?
	(a) £4-50 of £18 (b) 5 min of 1 h. (a)	(b) $\frac{1}{12}$	11	A by 5 cm
9	A strip of plastic 4 m 200 mm long is cut into 7 equal pieces.	(b) 12		A boy won a prize of £25 which he deposited in a bank at an interest
10	Find in mm the length of each piece	600 mm		rate of 6%. How much interest did he receive at the end of 1 year?
10	(a) £29.50 to the peacest s		12	(a) How many
	(b) $\frac{99}{30}$ to the peacest as-	(a) £ 30		centimetre cubes can be fitted into the
11	93p Find the sum of money	(b) 50p		bottom of the box?
12	The diameters of two circles	£ 4.65	1	(d)
	3.4 cm and 15.8 cm What is the	THE REAL PROPERTY.	6 cm	(b) If the volume of the box is 240 cm <sup>3</sup> ,
	radius of each circle in mm? 47 mm		M	find its height. (b) 4 cm

A		ANSWER	C	
	55 + 17 = × 9		ANSW	VER
2	£0.95 = 1 FIFTY + 1 TWENTY +		Find the missing numbers in this series. 0.125, 0.25, 0.375, 0.5 , 0.5	575
3	2.3 m - 90 cm = cm	5 FIVES140 cm	What number when added to 48 three times gives a total of 120?	
4	1 000 000 = thousands	1000 thousands	3 A date and raisin cake has a second	24
5	=	10 000 hundreds	mass of the fruit in g. 60	00 g
6	$7 \times y = 7532  \text{Find } y.$	3.420 kg	A line 8 cm long is drawn to the scale 1 mm to 0.1 m	
7	(a) 1% of £27	(a) 27p		8 m
8	(b) 8% of £27	(b) £ 2·16	5 3 30 2 1 3 3 5 1 5 8 8	4
9	$\frac{1}{2} + \frac{3}{8} + \frac{3}{4}$	1 5 8	Which of these fractions is less than ½?  6 Lawn sand is spread at the rate of	3
10	$2.050 \ell +                                 $	450 ml	125 g per 1 m². How many kg are	
11	5 of £90	75°	7 A motorist starts a journey of 36 km at	Kg
12	4.07 × 8	£ 75 32.56	09.45 and arrives at 10.30. At this speed (a) how far does he travel in $\frac{1}{4}$ h? (a) 12	km
			(b) Find his average speed in km/h. (b) 48 km	
В		ANSWER	The length of a rectangle is three times its breadth. If the perimeter is 192 cm	
1	24 36 54 60	72	find (a) the length (a) 72 (b) the breadth of the	cm
	Which of the numbers are multiple	5	rectangle. (b) 24 c	cm
-	of 4, 6 and 9? How many km are there in sevente	36 72	9 O is the centre of the circle the radius of which is 7.4 cm. Find	
2	hundred metres?	1.7 km	(a) the angle at the	00
3	Decrease £44 by 10%.	£ 39-60	(b) the length of the	00
4	How many h and min from 09.48 to 11.19?	1 h 31 min	straight line AB. (b) 7.4 co	m
5	What fraction in its (a) the part	lowest terms is	according to its sides. (c) equilater	
	shaded	(a) \(\frac{2}{3}\)	Of 150 children in a school 60 can swim 1 width of the pool, 45 can swim 1 length of the pool.	h
	(b) the part shaded	(b) <sup>1</sup> / <sub>4</sub>	What percentage of the children can swim (a) the width (a) 409	6
	(c) the part unshaded?	(c) $\frac{1}{12}$	(b) the length? (b) 30%	6
6	Find the cost of 2.25 ( at 28p per (.	63p	7 children shared a money prize equally. Each child received 42p	
7	How many biscuits each costing 7p are bought for £2-73?	39	and there was 6p left.  Find the total value of the prize.  £ 3	
8	Write each score as a percentage. (a) 18 out of 20	(a) 90%	The drawing shows a block of metal.	
	(b) 35 out of 35.	(b) 100%	(a) Find its	
9	5 articles cost 80p. What fraction of 80p will 3 articles cost?	3 5	5 cm 10 cm 300 cm <sup>3</sup>	
	by how many is 300 050 greater than a million?	50 050	(b) If the mass of the metal is 7 times that of water, what is the mass of the block in kg?	
11	Find \$ of £1-68 to the nearest penny		2.1 kg	
12	Find in cm³ the volume of a box		Turn back to page 30 and work for the fourth time Progress Test 2. Enter the result and the	
	Find in cm <sup>3</sup> the volume of a box 15 cm by 10 cm by 7 cm.	1050 cm <sup>3</sup>	date on the chart.	

CHIL	CK-UP	IESI	and the same	Mulliber		
•				, D	1 C	
<b>A</b> (a)			b)	В		
5 + 6	11	10 × 10	100	$(6 \times 6) + 5$ 41	27 × 8	216
8 + 8	16	4 × 7	28	(9 × 1) + 7 <u>16</u>	49 × 6	294
0 + 7	7	9 x 3	27	$(5 \times 8) + 4 $ 44	107 × 7	749
7 + 8	15	8 × 6	48	$(8 \times 0) + 6$ <u>6</u>	93 × 10	930
4 + 7	11	1 × 8	8	$(10 \times 5) + 8                                 $	180 × 10	1800
18 + 9	27	5 × 9	45	$(8 \times 8) + 6   70$	95 × 20	1900
15 + 8	23	7 × 7	49	$(3 \times 3) + 2$ <u>11</u>	86 × 40	3440
3 + 29	32	0 × 0	0	$(9 \times 8) + 7   79$	100 × 80	8000
7 + 36	43	4 × 8	32	$(4 \times 9) + 5$ 41	98 × 100	_ 9800
14 + 19	_33	9 × 7	63	$(7 \times 6) + 3   45$	204 × 100	20 400
12 - 5	7	24 ÷ 3	8	29 ÷ 3 9 rem. 2	102 ÷ 3	34
9 - 0	9	40 + 8	5	67 ÷ 8 8 rem. 3	336 ÷ 4	84
11 - 3	8	0 ÷ 6	0	21 ÷ 4 <u>5 rem. 1</u>	648 ÷ 6	108
14 - 5	9	54 ÷ 9	6	6 ÷ 7 <u>0 rem. 6</u>	590 ÷ 10	59
15 - 9	6	7 ÷ 7	1	39 ÷ 5 <u>7 rem. 4</u>	800 ÷ 10	80
24 - 6	18	42 ÷ 7	6	70 ÷ 9 <u>7 rem. 7</u>	540 ÷ 20	27
26 - 9	17	81 ÷ 9	9	51 ÷ 6 <u>8 rem. 3</u>	420 ÷ 60	7
32 - 8	24	36 ÷ 4	9	13 ÷ 7 <u>1 rem. 6</u>	1050 ÷ 50	21
58 - 9	49	63 ÷ 9		52 ÷ 5 10 rem. 2	4000 ÷ 100	40
47 - 20	_27	56 ÷ 8		4 ÷ 9 0 rem. 4	2900 ÷ 100	29
<b>D</b> Write	these numbers.			Write as decimals.	F How many te	nths equal
				47 tenths 4.7	6.8	68
Fifty thousand			50 007	201 tenths 20.1	14.9	149
	sand four hundre		62 402	4 hundredths 0.04	30.4?	304
	and forty thousar		140 011	309 hundredths 3.09		
	and six thousand	and nine	206 009	580 hundredths	How many hundred	
30 000 + 400			30 406	603 thousandths 0.603	0.93	93
100 000 + 70			107 058	75 thousandths 0.075	7.05	705
	$(6 \times 100) + (3)$	× 10) + 8	4638	3009 thousandths 3.009	3.2?	320
$(9 \times 1000) +$	$(7 \times 10) + 5$		0075	3 0 5.009	The state of the s	

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
$(4 \times 1000) + (6 \times 100) + (3 \times 10) + 8$	4638
$(9 \times 1000) + (7 \times 10) + 5$	9075
$(3 \times 1000) + (4 \times 10)$	3040
1 million	1 000 000
1½ million	1 500 000
1 million	250 000
2.7 million	2 700 000

	47	tenths	4.7
1	201	tenths	20.1
1	4	hundredths	0.04
Į	309	hundredths	3.09
ı	580	hundredths	5.8
ı	603	thousandths	0.603
ı	75	thousandths	0.075
I	3009	thousandths	3.009
ı	9 +	$\frac{3}{10} + \frac{8}{100}$	9.38
ı	10 +	$\frac{7}{100} + \frac{2}{1000}$	10.072
ı	5 ten	ths +	
ı	2 hur	ndredths	0.52
ı		indredths and	
	6 tho	usandths	0.176

6.8		68
14.	9	149
30.	4?	304
How many	hundredt	<b>hs</b> equal
0.9	3	93
7.0	5	705
3.2	?	320
How many	thousand	ths equal
0.0	03	3
0.0	78	78
1.5	2	1520
2.8		2800
4.0	9?	4090

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
14 00	0.5

G

.7 + 0.35 .28 + 1.625	<u>4.05</u> <u>1.905</u>
- 1.4	0.6
4 - 0.9	0.5
0 - 8.75	1.25
8 - 3.76	1.04
7 - 0.58	0.12

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

79 ÷ 10	7.9
40.2 ÷ 10	4.02
34 ÷ 100	0.34
10.7 ÷ 100	0.107
608 ÷ 1000	0.608
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

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
$10 \times x = 25$	2.5
$x \times 4 = 18$	4.5
$7 = \frac{x}{5}$	_ 35
$\frac{x}{10} = 0.6$	6
$9 + x = 7 \times 7$	_40

## CHECK-UP TEST

# **Money and Measures**

A	70p	=	£	0.70
,,	2p		£	0.02
	£0.63	=		63p
	£0.19	=		19p
	£0.04	=		4p
	£1.37	=	TENS	7p
	£3.09	=	TWENTIES	9p
£	10.80	=	TENS	0р
	+ 6 TW		r	82p

```
9p + 3p + 17p
                        29p
15p + 8p + 6p
                        29p
14p + 7p + 12p
                        33p
5p + 11p + 15p + 4p
                        35p
6p + 19p + 21p + 18p
                        64p
37p + 85p
                        1.22
£1.03 + 49p
                        1.52
£2.57 + £0.60
                        3.17
43p - 19p
```

	10 @	15p each	£	1.50
ı		3p each		3.00
ı	9 @	13p each	£	1.17
		27p each		2.16
Ì	5 @	45p each	£	2.25
ı	19 @	4p each		76p
١		7p each.		1.89
	The date		Section 1	00.00
1	Find th	e cost of 1	Wh	ien
		e cost of 1 st £2·70	wh	
		st £2.70	wh	27p 15p
	10 co 100 co	st £2.70	wh	27p
	10 co 100 co 6 co	st £2·70 st £15	wh	27p 15p
	10 co 100 co 6 co 4 co	st £2·70 st £15 st 84p	wh	27p 15p 14p
	10 co 100 co 6 co 4 co 7 co	st £2.70 st £15 st 84p st £0.72	wh	27p 15p 14p 18p

Find the cost of

7 TENS + 6 TWOS		82p
3 FIFTIES + 9 TENS	£	2.40
3 TENS + 5 FIVES + 9p		64p
£0.85 = 5 TENS + FIVES		7
£1.20 = 12 FIVES + TWENT	IES	3
£2.30 = 3 FIFTIES + TWENT	IES	4

(a) 73p

£ 4.27

(c) £2.54 £ 2.46

20 20 50

£1

£5 note after spending

-P 15P		Z4p
5p – 18p		77p
1·10 - 84p		26p
1·70 - 93p		77p
2·30 - £0·80	£	1.50
2·06 - £1·40		66p

<b>D</b> Find the chan	ge from			E	Make up the give number of coins.	en am	ount	s usir	ng th	e lea	st
Op after spending Op after spending	(a) 3p (a) 12p	17p	(b) 8p	12p	AMOUNT .	_	20p			2p	1p
Op after spending	(a) 12p	8p 13p	(b) 14p (b) 19p	<u>6p</u>	23p		1			1	1
op unter spending	(c) 26p	24p	(d) 5p	31p 45p	39p		1	1	1	2	
1 after spending	(a) 81p	19p	(b) 66p	34p	67p	1		1	1	1	
Total Control of the	(c) 45p	55p	(d) 7p	93p	78p	1	1		1	1	1
	17		(a) . P			7.00	7. 3	-			

(d) £1.98 £ 3.02

(b) £4.09

£

AMOUNT	50p	20p	10p	5p	2p	1p
23p		1			1	1
39p	The said	1	1	1	2	
67p	1		1	1	1	
78p	1	1		1	1	1
86p	1	1	1	1		1
94p	1	2	-		2	100

-			
F	84 cm	=	0.84m
	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

```
20.4 \, \text{cm} =
                      204 mm
    1.5 m =
                    1500 mm
                    2650 mm
  2.65 \, \text{m} =
                        85 cm
  0.85 \, \text{m} =
                     8370 m
  8.37 \, \text{km} =
                  600 m
    0.6 \, \text{km} =
10.075 \, \text{km} = 10.075 \, \text{m}
                     1325 g
  1.325 \text{ kg} =
                      50 g
    0.05 \text{ kg} =
                     3720 g
    3.72 \text{ kg} =
                     1300 ml
     1.3 ( =
                     4250 ml
    4.25 \( \epsilon =
```

91p

H	Find the cost of	
	500 g @ 76p per kg	38p
	100 g @ 50p per kg	5p
	250 g @ 36p per kg	9p
	200 g @ £1·20 per kg _	24p
	1.5 kg @ 64p per kg	96p
	100 g @ 45p per ½ kg	9p
	300 g @ £1·10 per ½ kg_	66p
	25 cm @ 92p per m	23p
	10 cm @ £3.50 per m	35p
	60 cm @ £2.20 per m £	1.32
	1.3 l @ 60p per l	78p
	800 ml @ 50p per l	40p

1	How many	1
	min in 3/4 h	45
	min in 1 ¼ 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

Change to 24-hour clock times. 07.35 7.35 a.m. 12.05 12.05 p.m. 15.27 3.27 p.m. 22.55 10.55 p.m. Change to 12-hour clock times. Use a.m. or p.m. 9.20 a.m 09.20 2.56 p.m. 14.56 12.35 a.m. 00.35

21.16

9.16 p.m.

Find the period of time between K 8.35 a.m. and 10.16 a.m. 1h 41 min 5.25 a.m. and noon 6h 35 min 4.30 p.m. and 7.20 p.m. 2h 50 min 11.35 and 14.15 2h 40 min 03.40 and 06.10. 2h 30 min

How many days inclusive	
from 28th Jan. to 9th Feb.	13
from 17th May to 5th June	20
from 26th Nov. to 3rd Jan.?	39
from 26th Nov. to 3rd Jan.	

## CHECK-UP TEST

## **Fractions and Percentages**

Fill in the missing numerator or denominator.

$$\frac{3}{4} = \frac{12}{16}$$

$$\frac{2}{3} = \frac{8}{12}$$

$$\frac{7}{8} = \frac{21}{24}$$

$$\frac{5}{5} = \frac{15}{18}$$

$$\frac{4}{5} = \frac{40}{50}$$

enominator. 
$$\frac{7}{8} = \frac{21}{24}$$
  $\frac{5}{6} = \frac{15}{18}$   $\frac{4}{5} = \frac{40}{50}$   $\frac{3}{10} = \frac{30}{100}$ 

Reduce each fraction to its lowest terms.

$$\frac{9}{12} = \frac{3}{4}$$

$$\frac{12}{18} = \frac{2}{3}$$

$$\frac{20}{55} = \frac{4}{5}$$

$$\frac{24}{30} = \frac{4}{5}$$

$$\frac{24}{30} = \frac{4}{5}$$
  $\frac{70}{100} = \frac{7}{10}$   $\frac{45}{100} = \frac{9}{20}$ 

$$\frac{45}{100} = \frac{9}{20}$$

Change each improper fraction to a mixed number.

$$\frac{31}{5} = 6\frac{1}{5}$$

$$\frac{31}{5} = \frac{61}{5} \qquad \frac{43}{8} = \frac{5\frac{3}{8}}{8}$$

$$\frac{29}{6} = 4\frac{5}{6}$$

$$\frac{29}{6} = \underline{4\frac{5}{6}} \qquad \qquad \frac{77}{10} = \underline{7\frac{7}{10}} \qquad \qquad \frac{40}{3} = \underline{13\frac{1}{3}}$$

$$\frac{40}{3} = 13\frac{1}{3}$$

Change each mixed number to an improper fraction.

$$7\frac{3}{4} = \frac{31}{4}$$

$$7\frac{3}{4} = \frac{31}{4}$$
  $8\frac{2}{3} = \frac{26}{3}$ 

$$5\frac{4}{5} = \frac{29}{5}$$

$$9\frac{7}{10} = \frac{97}{10}$$
  $4\frac{7}{8} = \frac{39}{8}$   $10\frac{5}{6} = \frac{65}{6}$ 

$$4\frac{7}{8} = \frac{39}{8}$$

$$10\frac{5}{6} = \frac{6}{6}$$

### Write as a fraction in its lowest terms.

50 of 75
30p of £1.00
25 cm of 1 m
12 kg of 30 kg
70 of 100
800 g of 1 kg
400 ml of 2 l

### Find

<sup>3</sup> / <sub>5</sub> of 70	42_
5 of 64	40
7 of £1·20	84 p
5 of 42 ℓ	35 l
<sup>4</sup> / <sub>7</sub> of 350 g <sup>13</sup> / <sub>100</sub> of £1·00	200 g
13 of £1.00	13 P
<sup>2</sup> / <sub>3</sub> of 1200	800
35 of 1 kg.	350 g

## D Find the whole when

$\frac{1}{6}$ is 35	210
$\frac{3}{4}$ is 27p	36p
<sup>4</sup> / <sub>5</sub> 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
3/8 is 24 ℓ	64 (
$\frac{9}{20}$ is £1.80	£ 4·00

## 45 of 100

### Write as percentages.

(a) 
$$0.65$$
 (a)  $\frac{29}{100}$ 

$$\frac{65\%}{29\%}$$
 (b) 0.38 (b)  $\frac{56}{100}$ 

$$\frac{38\%}{56\%}$$
 (c) 0.75

$$\frac{1}{1}$$
 (d)  $\frac{13}{100}$ 

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

19p

8.00

9.00

(a) 
$$\frac{19}{50} = \frac{38}{100} = \frac{38\%}{100} = \frac{12}{100} = \frac{12}{100} = \frac{12}{100} = \frac{3}{100} = \frac{75}{100} = \frac{75\%}{100} = \frac{80}{100} = \frac{80}{100} = \frac{12}{100} = \frac{80}{100} = \frac{12}{100} =$$

(b) 
$$\frac{3}{25} = \frac{12}{100} = 12\%$$

(c) 
$$\frac{13}{20} = \frac{65}{100} = \frac{65\%}{100}$$
  
(c)  $\frac{7}{10} = \frac{70}{100} = \frac{70\%}{100}$ 

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)	(1)	(m)
VULGAR FRACTION (LOWEST TERMS)	1/2	1/4	<u>3</u> 4	1/5	2 5	3 5	4 5	1/10	<u>3</u>	7 10	9 10	1/20	1 100
DECIMAL FRACTION	0.5	0.25	0.75	0.2	0.4	0.6	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%

### Find the value of 25% of 120 172 50% of 35 75% of 400 300 10% of 1000 100 27 30% of 90 140 70% of 200 144 90% of 160

20% of 95p

40% of £20

60% of £15.

### G

Find the value of		
50% of 14p		7p
20% of £6.50	£	1.30
100% of 93p		93p
10% of 2.5 kg	2	250 g
5% of 4 l	2	200 ml
30% of 2 m		60 cm
1% of £1.00		1p
7% of £1.00		7p
3% of £3.00		9p
12% of £9.00.	£	1.08

Find as a percentage 6 of 24	25%
$7\frac{1}{2}$ of 15	50%
40p of 50p	80%
93p of 93p	1009
200 g of ½ kg	40%
700 ml of 1 l	709
25p of £2·50	109
£1.50 of £2.00	75%
7p of £1.00	79
30 cm of 1.5 m.	20%

# CHECK-UP TEST Approximations, Angles and Shapes

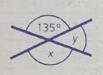
A	Approximate to t whole number	49.55	50
	whole number	205	20
	hundred	6057	6100
	hundred	19 503	19 500
	thousand	59 770	60 000
	thousand	109 495	109 000
	£1.00	£27·50	£ 28

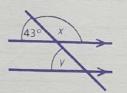
Find to the nearest penny (a)  $\frac{1}{10}$  of 97p 10p

В	Approxima	te to the nea	arest	
	metre		59 cm	9 m
	metre	19 r	n 700 mm	20 m
	kilogram	16 k	g 50 g	16 kg
	kilogram	7.55	50 kg	8 kg
	½ kg	9 kg	800 g	10 kg
	½ kg	6.55	50 kg	6.5 kg
	litre	39.8	370 ℓ.	40 ℓ
(b) ½ o	f £2·50	83p	(c) $\frac{£3.35}{4}$	84p

How many degrees in each of the angles x and v?







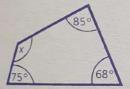
angle x 283°

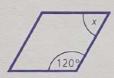
angle x 135° angle y

angle x 137° angle v 43° Find the missing angle in each of the triangles. Then name each triangle according to (a) the angles (b) the sides.

ANGLES IN TRIANGLE			(a) NAME OF TRIANGLE (ANGLES)	(b) NAME OF TRIANGLE (SIDES)	
32°	58°	90°	right-angled	scalene	
46°	52°	82°	acute-angled	scalene	
60°	60°	60°	acute-angled	equilateral	
17°	125°	38°	obtuse-angled	scalene	
57°	57°	66°	acute-angled	isosceles	

E





(a) the rhombus 60°

(c) the parallelogram 50°



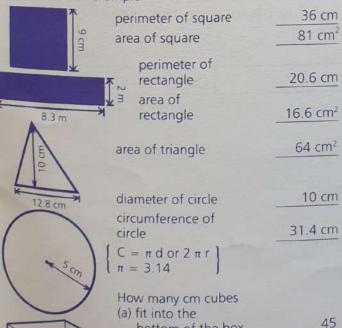
(b) the trapezium 125°

(d) the irregular quadrilateral 132°

130°

Find the angle x in

Give the unit of measurement in the answer for each example.



bottom of the box

(b) fill the box?

Write the missing measurement in each of the squares or rectangles.

Area	50 m <sup>2</sup>	121.5 cm <sup>2</sup>	25 cm <sup>2</sup>	16 m <sup>2</sup>
Length	5 m	13.5 cm	10 cm	32 m
Breadth	10 m	9 cm	2.5 cm	50 cm

Write the missing measurement in each of the triangles.

16 cm	45 m	10 cm	12 cm
8 cm	12 m	18 cm	7 cm
64 cm <sup>2</sup>	270 m <sup>2</sup>	90 cm <sup>2</sup>	42 cm <sup>2</sup>
		8 cm 12 m	8 cm 12 m 18 cm

Write the missing radius or diameter.

radius	15.3 cm	18 mm	4.9 cm	27.6 cm
	70 6	36 mm	9.8 cm	55.2 cm
diameter				

Find the circumference of a circle when 28.26 cm r = 4.5 cm21.98 cm d = 7 cm

Find the volume of each of these boxes. length 13 cm, breadth 8 cm, height 2 cm 208 cm<sup>3</sup> length 7 cm, breadth 4 cm, height 2.5 cm 70 cm<sup>3</sup> 216 cm3 cube of 6 cm side

180