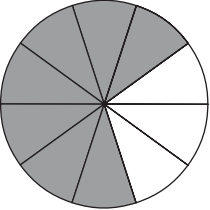


Sheet 38

Fractions, Decimals, Percentages

Write each shaded shape as a fraction, a decimal and a percentage.

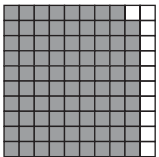
1



0.

%

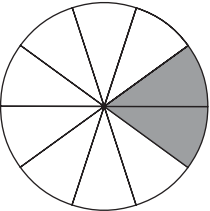
2



0.

%

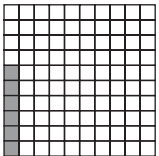
3



0.

%

4



0.

%

5 Complete the table.

Fractions	Decimals	Percentages
$\frac{29}{100}$	0.29	29%
$\frac{1}{4}$		
		20%
	0.75	
	0.4	
$\frac{93}{100}$		
	0.1	
		50%
$\frac{3}{5}$		
		80%
	0.03	
		1%
$\frac{1}{20}$		

Fill in the boxes.

6 One quarter of the children at a football club are girls.
 % are boys.

7 Seven tenths of the Earth's surface is covered with water.
 % is land.

8 Petra scored 83 out of 100 in her Science Test. % of her answers were wrong.

9 There are 50 children in Year 5. one is absent.
 % are at school.

Sheet 39

Fractions, Percentages of Amounts

Examples	$\frac{3}{5}$ of 90p	10% of 60	$30\% \text{ of } 90\text{p} = \frac{3}{10} \text{ of } 90\text{p}$
	$(\frac{1}{5} \text{ of } 90\text{p}) \times 3$	$\frac{1}{10}$ of 60	$(\frac{1}{10} \text{ of } 90\text{p}) \times 3$
	$18\text{p} \times 3$	6	$9\text{p} \times 3$
	54p		27p

Work out

- | | | |
|--------------------------------------|--|--|
| 1 $\frac{1}{10}$ of 110 | 5 $\frac{3}{10}$ of 80 | 9 $\frac{3}{5}$ of £1p |
| 2 $\frac{7}{10}$ of 60 | 6 $\frac{1}{10}$ of 230 | 10 $\frac{5}{8}$ of 40 cmcm |
| 3 $\frac{3}{4}$ of 60 | 7 $\frac{1}{6}$ of 90 pp | 11 $\frac{3}{4}$ of 1 mcm |
| 4 $\frac{2}{5}$ of 45 | 8 $\frac{83}{100}$ of £1p | 12 $\frac{9}{10}$ of 1mcm |

Work out

- | | | |
|-----------------------------|-----------------------------|------------------------------|
| 13 10% of 60 | 17 30% of 250 | 21 10% of £2.50 |
| 14 20% of 55 | 18 75% of 1000 | 22 25% of £1.20 |
| 15 50 % of 150 | 19 50 % of £9 | 23 70% of £3.50 |
| 16 25% of 60 | 20 40% of 60p | 24 90% of £2.00 |

25 40 biscuits in a packet.
Five eighths are eaten.
 biscuits are left.

27 City scored 70 goals.
40% were headers.
 goals were headers.

26 28 children in a class.
Four sevenths are boys.
 are girls.

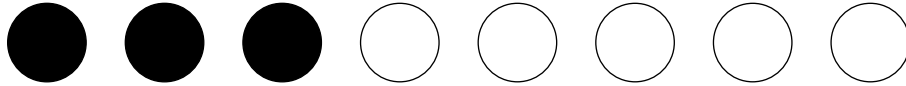
28 A dress costs £30.
There is 25% off in a sale.
The new price is £ .

Sheet 40

Scaling

Fill in the boxes.

A necklace is made using this pattern of beads.



- 1 How many white beads are there if there are:
 - a) 6 black beads
 - b) 40 beads altogether?
- 2 How many black beads are there for every:
 - a) 20 white beads
 - b) 35 white beads?
- 3 How many white beads are there in every:
 - a) 24 beads
 - b) 64 beads?
- 4 There are two adults for every nine children on a trip.
There are 8 adults and children on the trip.
- 5 Five customers in a supermarket spent £20 or more for every two who spent less than £20. 250 customers spent £20 or more. spent less than £20.
- 6 Peter has three fiction books for every four non-fiction. He has 60 fiction and non-fiction books.
- 7 In April it rained on 3 days for every 2 dry days. It rained on 18 days and was dry on days.
- 8 In Year 5 there are 6 boys for every 5 girls. There are 30 boys in the Year and girls.
- 9 Four cars passing a school had no passengers for every three with at least one passenger. Altogether 56 cars passed the school. had no passengers. had at least one passenger.
- 10 Eighty members of a football club vote for their new club captain. Seven in ten members vote for Lionel. Lionel wins votes. people vote for other candidates.

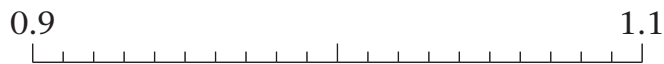
Sheet 41

Ordering and Rounding Decimals

Draw a circle around the larger of each pair of numbers.

- 1 2.5 2.45 3 7.99 9.7 5 1.1 1.07
- 2 4.35 3.54 4 6.75 7.56 6 3.38 3.8
- 7 Locate the numbers on the line.

1.03 0.99 0.92 1.0 1.07 0.96



Arrange the decimals in order. Start with the smallest.

- 8 22.8 8.2 8.02 28.2 2.8
- 9 4 0.4 4.3 0.34 3.4
- 10 3.7 7.3 7.37 3.77 3.37
- 11 6.61 8.6 6.81 8.16 8.61
- 12 2.12 1.21 2.1 1.22 1.2

Round to the nearest:

pound

whole number

metre

- | | | |
|---|---|---|
| <ul style="list-style-type: none"> 13 £2.48 ... £2..... 14 £15.61 15 £8.27 16 £29.70 17 £11.39 18 £4.52 | <ul style="list-style-type: none"> 19 18.27 20 5.72 21 35.9 22 1.08 23 27.54 24 9.6 | <ul style="list-style-type: none"> 25 3.37 m 26 24.7 m 27 12.05 m 28 39.51 m 29 7.18 m 30 53.49 m |
|---|---|---|

Sheet 42

Counting in Decimal Steps

Examples		
Count on 4 steps of 0.6		$0.6 \times 4 = 2.4$
Count back in steps of 0.05 from 0.3		$0.3 \div 0.05 = 6$

- 1 Start at 0. Count on 6 steps of 0.3.
- 2 Start at 0. Count on 5 steps of 0.7.
- 3 Start at 0. Count on 9 steps of 0.02.
- 4 Start at 0. Count on 4 steps of 0.9
- 5 Start at 0. Count on 7 steps of 0.06.
- 6 How many steps of 0.4 are needed to reach 2.0?
- 7 How many steps of 0.08 are needed to reach 0.24?
- 8 How many steps of 0.5 are needed to reach 4.5?
- 9 How many steps of 0.03 are needed to reach 0.21?
- 10 How many steps of 0.07 are needed to reach 0.56?

Work out

- | | |
|--------------------------|---------------------------|
| 11 0.2×7 | 16 $6.4 \div 0.8$ |
| 12 0.05×5 | 17 $0.12 \div 0.02$ |
| 13 0.09×8 | 18 $6.3 \div 0.9$ |
| 14 0.6×9 | 19 $0.3 \div 0.06$ |
| 15 0.04×7 | 20 $4.2 \div 0.7$ |