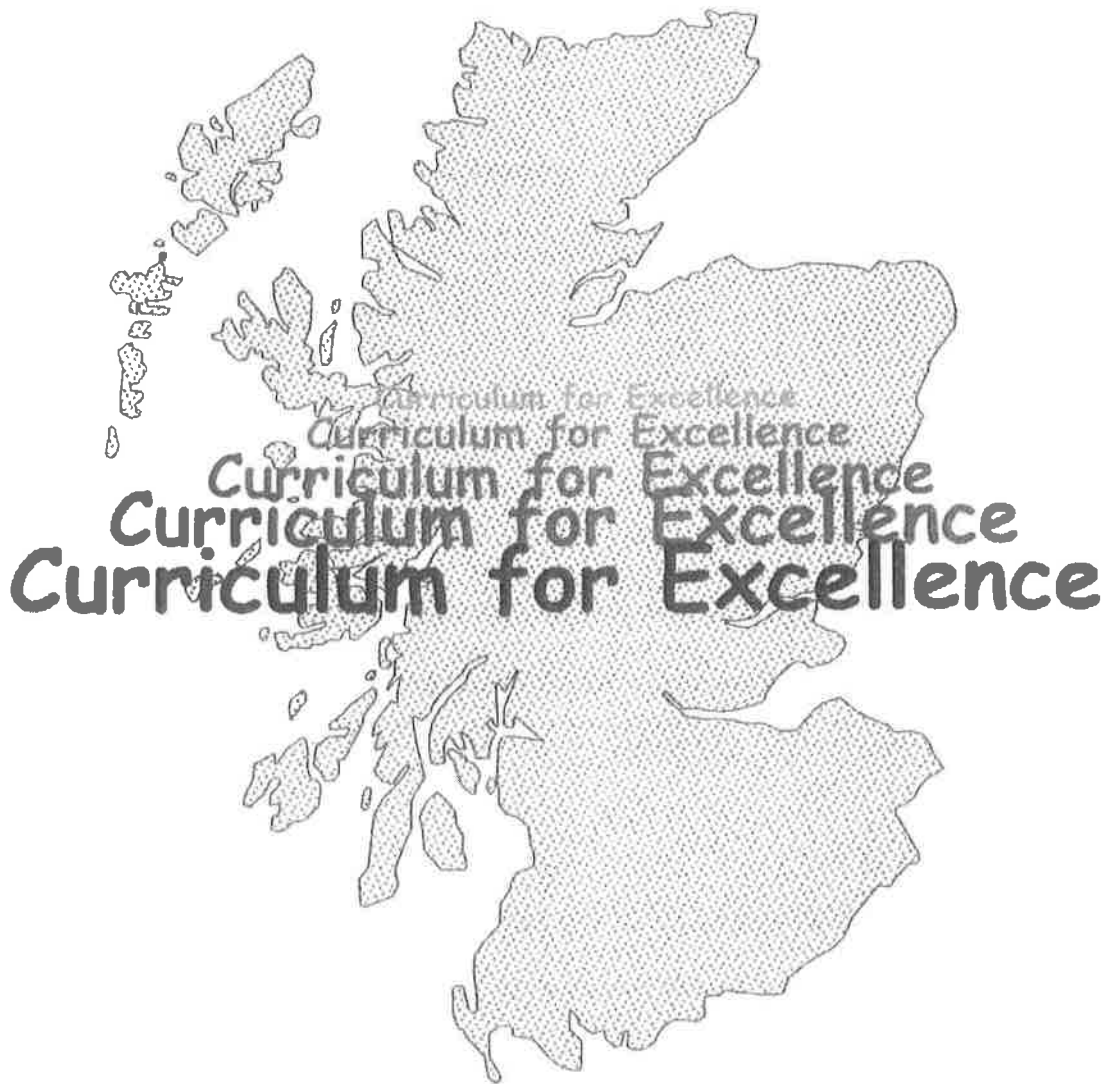




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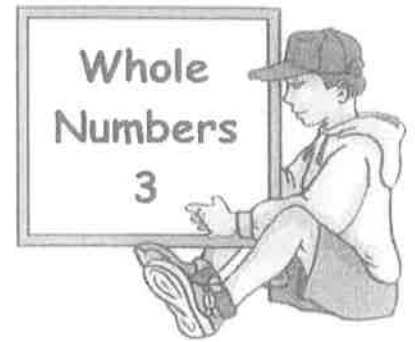
Book 2b



Homework

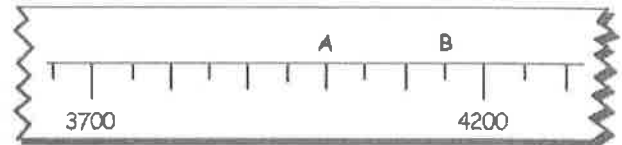
CHAPTER 1

Consolidation



- Write out the number 418 706 fully in words.
- Write the number "sixty four thousand and seventy one" using digits.
- Rearrange the numbers given below in order, starting with the largest :-
49 138 49 318 50 112 48 992 50 120 48 979.

- What numbers are represented by A and B on the given scale ?

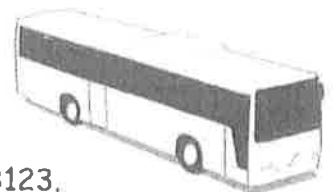


- What number lies halfway between 49 000 and 57 000 ?
- Set down the following and calculate :-

a 4719 + 1582 -----	b 8436 - 3762 -----	c 7908 + 682	d 5000 - 3693.
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- Round to the nearest 10 :- a 76 b 792 c 4887.
- Round to the nearest 100 :- a 1472 b 8551 c 72 350.
- Round to 1 figure accuracy and find an approximate answer to 48 100 - 29 070.
- Copy the following and complete the calculations :-

a 9432 x 7 ----- -----	b 4 19016	c 2647 x 9	d 5176 ÷ 8.
------------------------------------	--	---------------	----------------

- What is :- a 3162 x 10 b 603 x 100 c 39 100 ÷ 100 d 58 000 ÷ 1000 ?
- A coach driver drives 286 miles each day, Saturday to Friday.
How many miles does he cover in that time ?



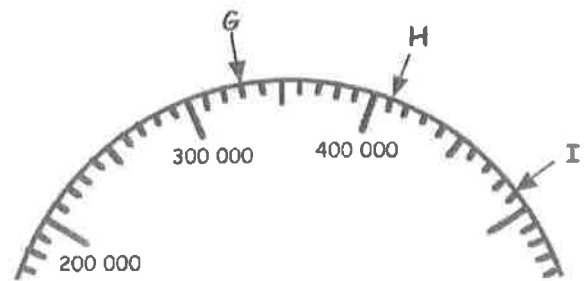
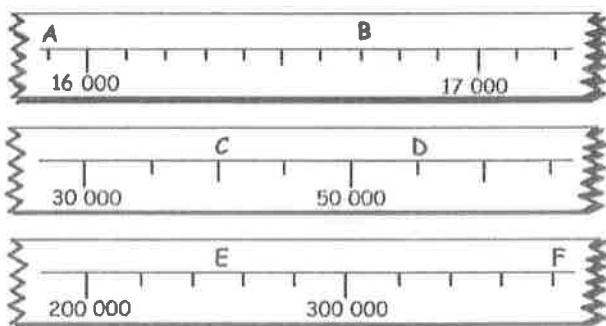
13.



Nine people shared a bingo win of £3123.
How much did they each receive ?

Exercise 1

1. What do the following **digits** stand for in the number 3 596 184 :-
 a 3 b 6 c 9 d 5 ?
2. What does the **5** stand for in each of these numbers :-
 a 47 530 b 48 251 c 935 200 d 5 680 703 ?
3. Write the following numbers out fully in **words** :-
 a 34 600 b 561 090 c 1 730 000 d 8 014 050.
4. Write the following numbers **using digits** :-
 a six hundred and forty thousand and eight
 b three million, nine hundred and twelve thousand
 c fourteen million, thirty thousand and seventy two.
5. Put the following set of numbers in order, **largest first** :-
 100 460, 99 939, 100 064, 98 889, 89 988, 100 640.
6. Write down the number that is :-
 a 60 after 480 b 90 before 1930 c 3000 after 177 003
 d 7500 before 800 000 e 400 200 before 2 100 600.
7. Look at the following scales. What numbers are represented by **A, B, C, ... ?**



8. What number lies **halfway** between :-
 a 4200 and 4800 b 52 000 and 52 900 c 900 000 and 1 300 000
9. Write out these in **figures** :-
 a $\frac{1}{2}$ million b $1\frac{3}{4}$ million c $2\frac{1}{4}$ million.

Exercise 2

- Try to do the following mentally :- (use the 2-step approach)
 - 18×70
 - 40×123
 - 67×200
 - 312×800
 - 3000×56
 - 240×9000
- Calculate each of the following :-
 - 547×30 [Find 547×10 first = 5470 and then find 5470×3]
 - 4167×60
 - 5674×80
 - 9874×90
 - 3295×30
 - 70×6047
 - 36769×20
- Work out each of the following using the same 2 steps :-
 - 309×400 [Find 309×100 first = 30900 and then find 30900×4]
 - 463×300
 - 700×408
 - 900×748
 - 815×6000
 - 8000×237
 - 7000×6870
- Do the following mentally :-
 - 40×500
 - 200×800
 - 3000×9000
 - $24000 \div 400$
 - $5600000 \div 800$
 - $21700000 \div 7000$
- There are 86 400 seconds in an hour. How many seconds are there in 50 hours ?

Exercise 3






- Round to the nearest 10 :-
 - 79
 - 293
 - 7
 - 705
 - 3766
 - 8904
 - 4097
 - 14494
- Round to the nearest 100 :-
 - 798
 - 419
 - 7610
 - 8463
 - 23291
 - 26850
 - 88249
 - 47951
- Round to the nearest 1000 :-
 - 5700
 - 19160
 - 83912
 - 17502
 - 468499
 - 384511
 - 369708
 - 299981
- It cost Real Madrid £79 452 000 to buy Ronaldo.
Round this amount to the nearest :-
 - £million
 - £10 million.






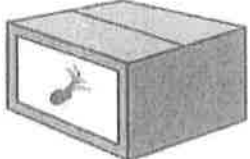

Exercise 4

- Round each number to 1 figure accuracy, then give an estimate for :-

a	81×38	b	47×62	c	98×51	d	496×62
e	308×89	f	875×193	g	$496 \div 53$	h	$4038 \div 36$
i	$5874 \div 189$	j	$643\,657 \div 313$	k	$19\,076 \div 379$	l	$98\,808 \div 4865$
- This bottle of tomato sauce weighs 712 grams.
What is the **approximate** weight of a carton containing 24 bottles ? 
 -  A computer company made £27 324 on selling 195 notebooks.
Approximately, what were each of them sold for ?
 - On average, a lorry driver travels 41 875 miles per year while at work.
If a haulage company employs 209 drivers, what will the **approximate** total mileage travelled by these drivers be ? 

Exercise 5



- The seating capacity of the Pavillion Theatre in Glasgow is 1449.
If it was filled to capacity on 230 occasions last year,
how many people attended the Theatre in total ? 
- A shop bought in five thousand nine hundred and fifty Easter eggs.
If an equal amount were sold over a fortnightly period,
how many eggs on average were sold each day ? 
-  A box holds 280 locks. A double glazing company ordered 30 boxes.
8195 locks were used when windows were renewed in a housing estate.
How many locks did the company have left ? 
- A greengrocer bought 50 boxes of pineapples for £675.
He sold them for £19.30 per box.
 - How much money did he collect when he sold all the boxes of pineapples ?
 - How much more was this than he had paid for them ?
-  Jennifer receives a monthly wage of £2445.80.
Marjorie gets paid weekly at the rate of £565 per week.
Who has the larger annual salary and by how much ?

Exercise 6



1. Use **BOMDAS** to help you calculate :-

a $12 + 9 \times 2$

b $40 - 28 \div 4$

c $30 - 18 \div 2 - 13$

d fifth of $70 - 10$

e $10 + \frac{1}{2}$ of 50

f $15 - \frac{1}{4}$ of $20 + 4$

g $8 \times 2 - 21 \div 3 + 6$

h $7 \times 6 - 2 \times 9 + 20 \div 4$

i $9 - \frac{1}{5}$ of $(50 - 20)$.

2. Find, showing two more steps each time :-

a $7 + (18 \div 2)$

b $54 \div (12 - 3)$

c $5 \times (14 + 6)$

d $200 \div (16 + 4)$

e $6 \times (7 + 3) - 50$

f $(6 + 3) \times (7 - 2) + 5$.

g $25 - \frac{1}{8}$ of 40×5

h $\frac{1}{3}$ of $(\frac{1}{6}$ of 18)

i $((6 + 4) \div 2) \times 3 - 10$.

3. Copy each of the following and **insert brackets** to make each calculation correct :-

a $8 + 3 \times 4 = 44$

b $23 - 6 \times 3 = 5$

c $20 + 8 \div 7 = 4$

d $2 + 8 \div 2 \times 8 = 34$

e $12 + 20 \div 10 - 7 = 7$

f $6 + 4 \times 8 - 5 \div 2 = 15$.

Revision Exercise



1. a Round to the nearest 10 :- (i) 59 (ii) 4783 (iii) 16845
b Round to the nearest 100 :- (i) 238 (ii) 1570 (iii) 19173
c Round to the nearest 1000 :- (i) 2647 (ii) 31498 (iii) 456502.

2. a Round both numbers to the nearest 10, then estimate :- $478 + 296$
b Round both numbers to the nearest 100, then estimate :- $6391 - 2524$
c Round both numbers to the nearest 1000, then estimate :- $14760 + 5438$.

3. Estimate :- a 5376×9 b $20875 \div 7$.

4. The population of Wales in July of 2011 was 3 028 899.
Round this number to the nearest ten thousand.



5. Set down these calculations and work them out :-

a $18\,479 + 416$

b $49\,103 - 34\,877$

c 1946×7

d 3958×4

e $584\,538 + 126\,496$

f $13\,875 \times 9$

g $137\,905 \div 5$

h $26\,328 \div 3$

i $2\,480\,023 \div 7$.

6. Write down the answer to :-

- a 540×10 b 762×1000 c 476×100 d 3000×1000
e $470 \div 10$ f $27\,500 \div 100$ g $3\,701\,000 \div 100$ h $6\,108\,000 \div 1000$.

7. Find :-

- a 126×30 b 78×200 c 537×500 d 115×8000
e $630 \div 70$ f $20\,300 \div 700$ g $8\,404\,200 \div 900$ h $2\,320\,000 \div 4000$.

8. I flew from Edinburgh to Dubai, a distance of 5777 miles and then on to Shanghai, a further 6450 miles.

- a How far did I travel in total ?
b How much shorter was the first journey ?



9. When a number is multiplied by 8 the answer is 69 992.
What is that number ?

10.



The total amount of annual fees collected by the manager of a leisure centre consisting of 365 members was £153 300.
How much did each member have to pay annually ?

11. 48 people work an eight hour shift at a furniture store.
If the total wage bill for them is £2880,
what is their **hourly** rate of pay ?



12.



A buyer for a fashion store bought 80 jackets for £5200.
The store managed to sell all but 8 of them for £76 each.
a How much money did the store take in ?
b How much did the store make out of these sales ?

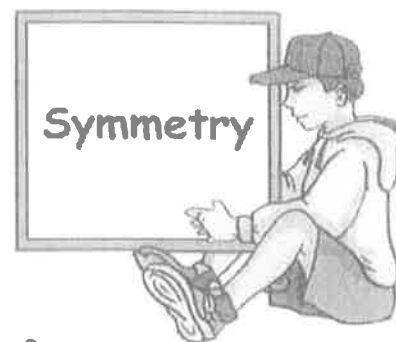
13. Mary bought a new sports car worth £43 750. She arranged to pay the dealer £7 000 and then pay what was still owed over a period of 24 months.

After that first payment :-

- a how much did she still owe the dealer ?
b what had she to pay per month to clear what she owed ?

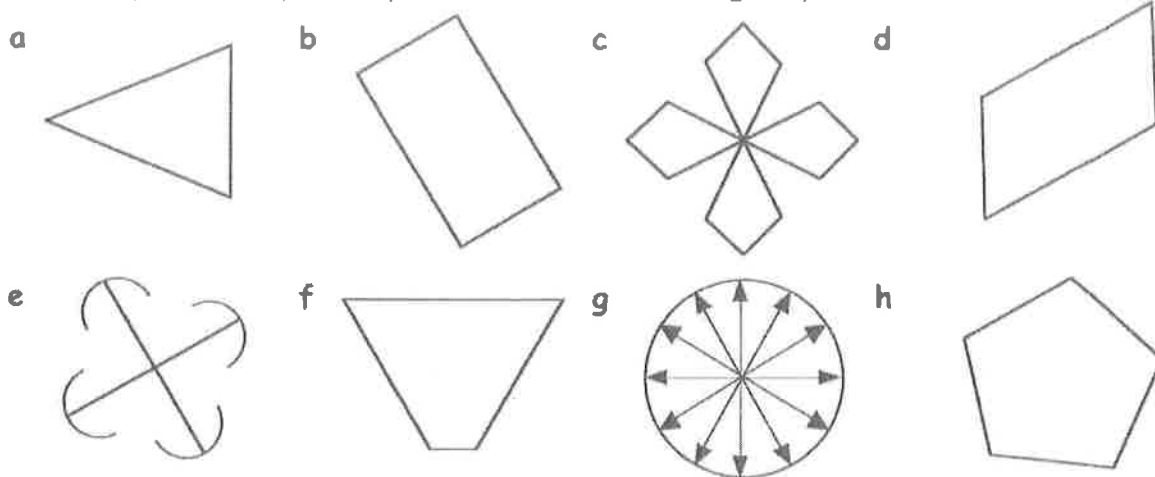


CHAPTER 2

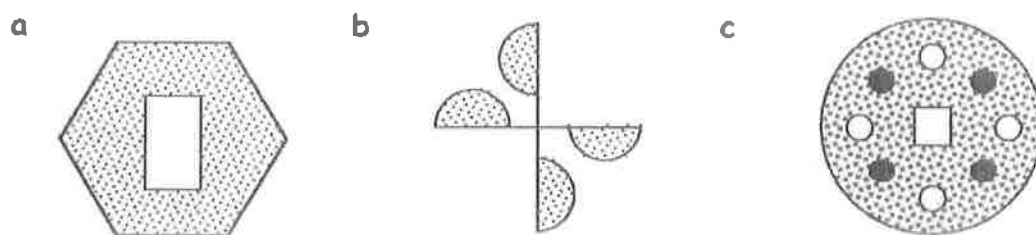


Consolidation

1. If a shape has 2 lines of symmetry - what does this mean ?
2. How many lines of symmetry do each of the following shapes have ?

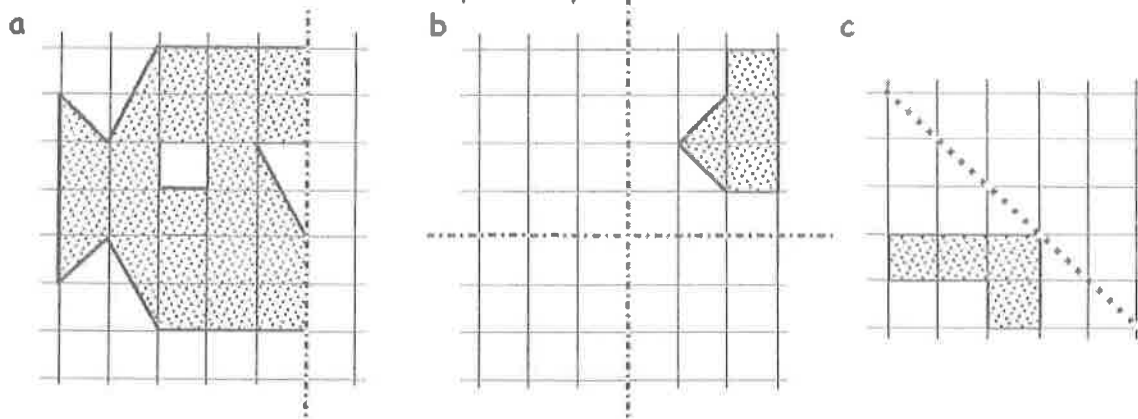


3. Trace or copy these shapes, neatly.



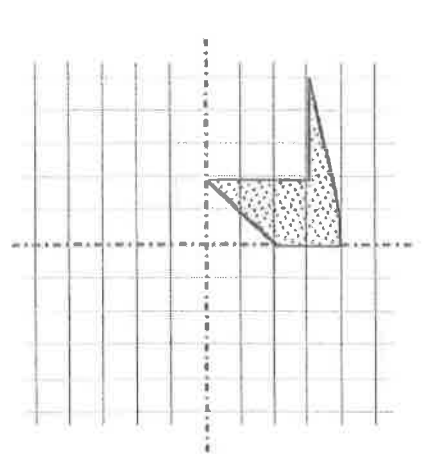
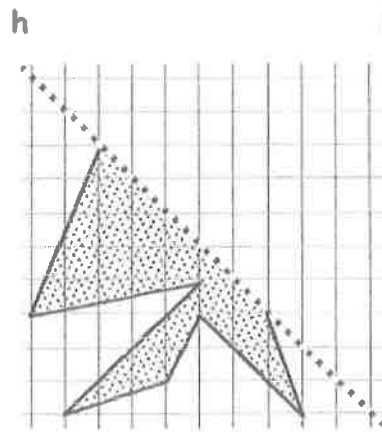
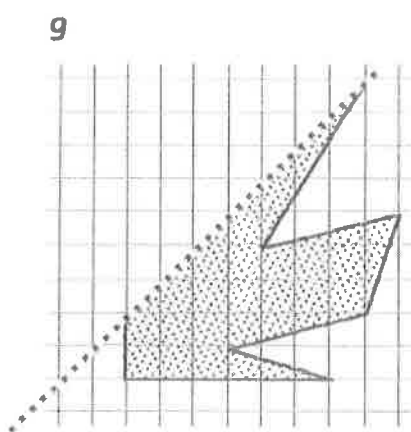
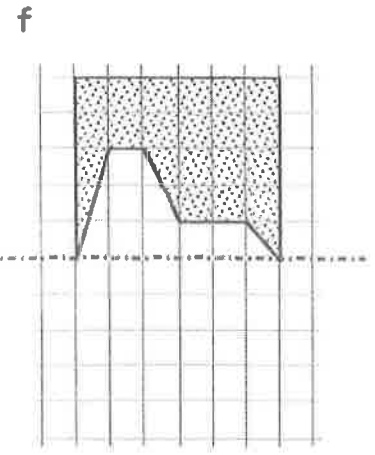
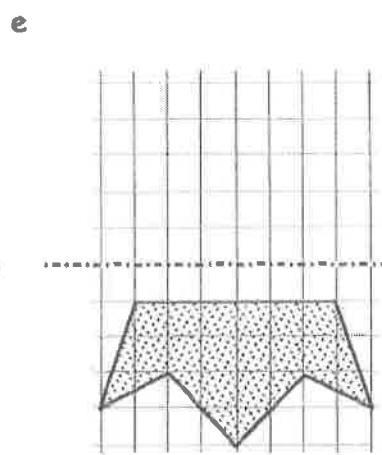
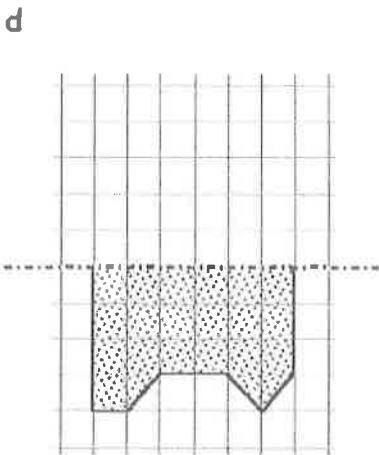
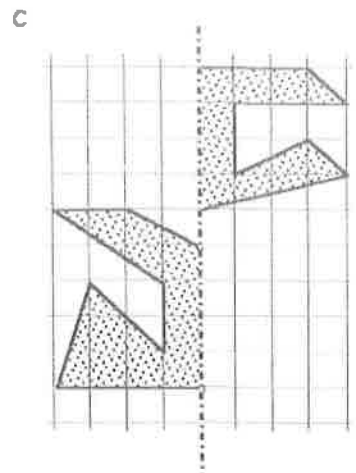
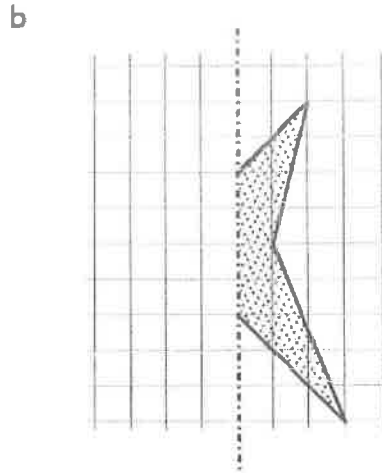
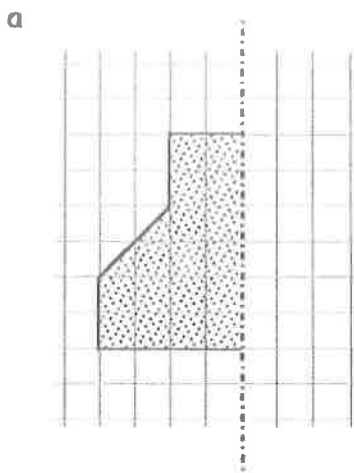
Mark with dotted lines ALL the lines of symmetry.

4. Trace or copy the following shapes neatly onto squared paper and complete them so that the thick lines are lines of symmetry.



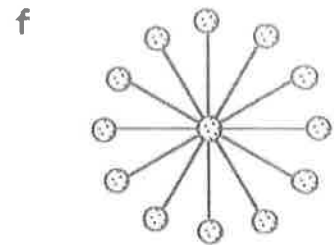
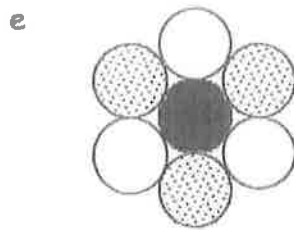
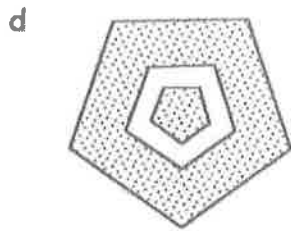
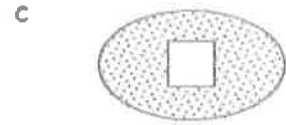
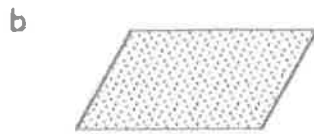
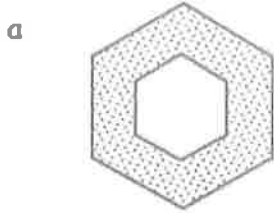
Exercise 1

1. Trace or copy the following shapes neatly onto squared paper and complete them so that the thick lines are lines of symmetry.

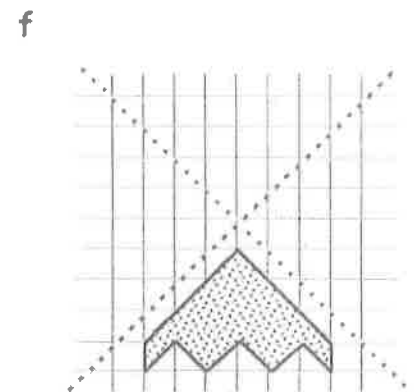
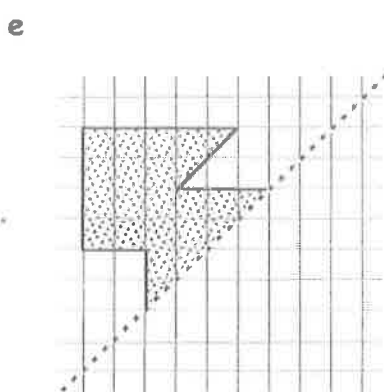
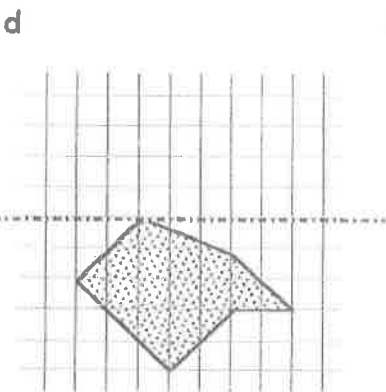
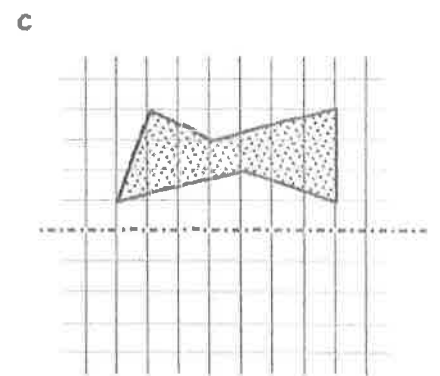
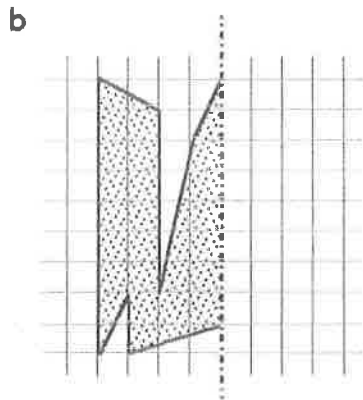
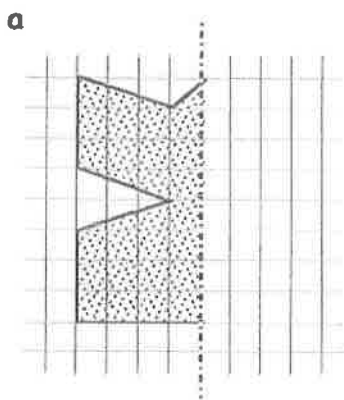


Revision Exercise

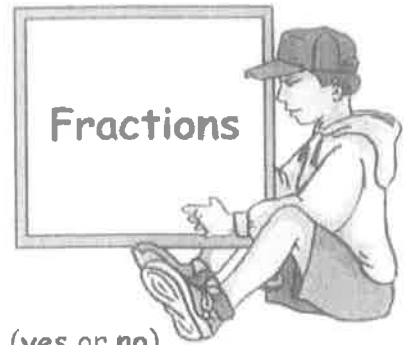
1. Copy or trace each of these shapes and draw in any lines of symmetry :-



2. Complete each shape so that the thick line is a line of symmetry :-

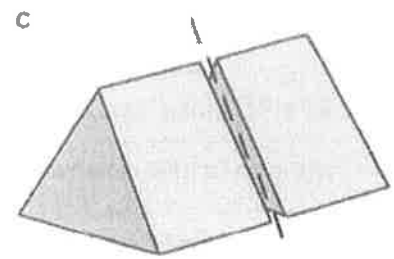
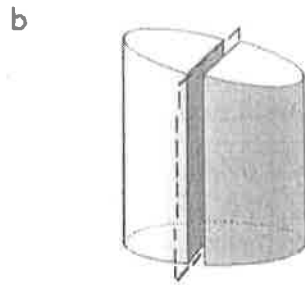
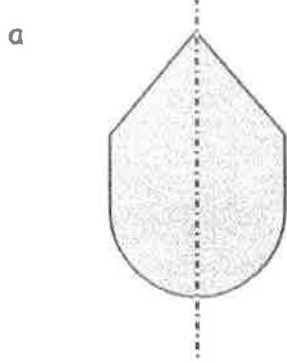


CHAPTER 16

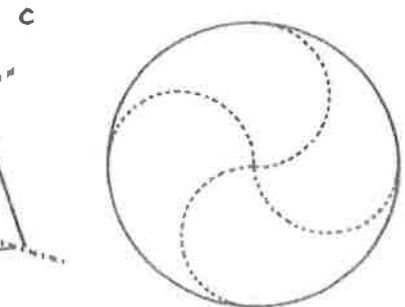
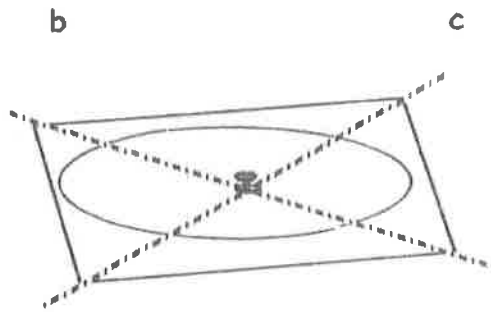
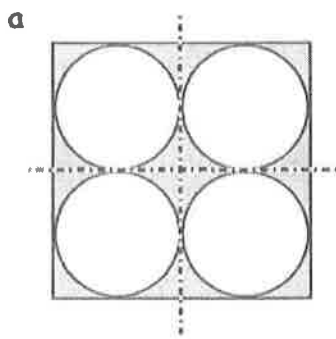


Consolidation

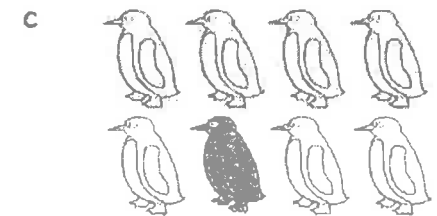
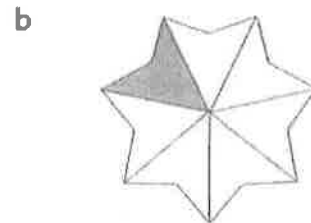
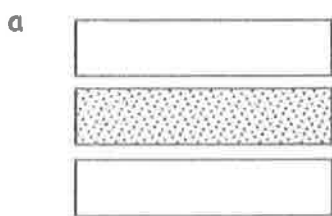
1. Which of these figures have been cut exactly in half? (yes or no)



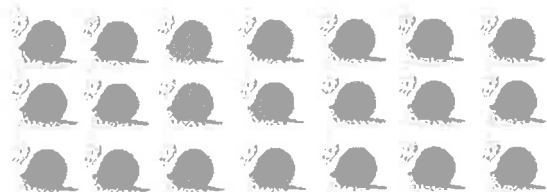
2. Which of these shapes have been cut exactly into quarters? (yes or no)



3. What fraction has been shaded in each of these?



4. There are 21 snails in my garden.
 $\frac{1}{3}$ of them are eating my plants.
 How many snails are doing that?



5. a What is a half of £20?

b What is a quarter of 32 centimetres?

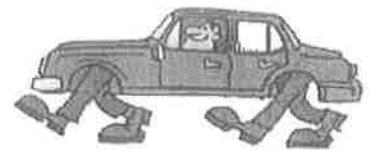
Exercise 1

1. Find :-

- | | | |
|--------------------------|------------------------------|-----------------------------|
| a $\frac{1}{2}$ of 80p | b $\frac{1}{3}$ of 27 metres | c $\frac{1}{5}$ of 45 grams |
| d $\frac{1}{10}$ of £120 | e $\frac{1}{4}$ of 28 litres | f $\frac{1}{6}$ of £84 |
| g $\frac{1}{8}$ of 72 cm | h $\frac{1}{7}$ of 84p | i $\frac{1}{9}$ of £54. |

2. It's 45 miles by road from my work in Greenock to my home.

My car broke down when I was $\frac{1}{3}$ of the way home.



- a How far had I travelled from work ?
- b How far had I still to travel to reach my house ?

3.

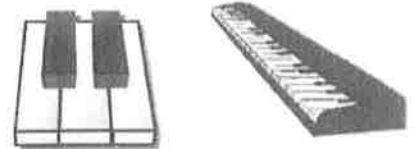


Tulisa went to the baths on only one day last September.

What fraction of that month was that ?

4. My electric keyboard has 76 keys.

$\frac{1}{4}$ of the keys on my keyboard are not working !



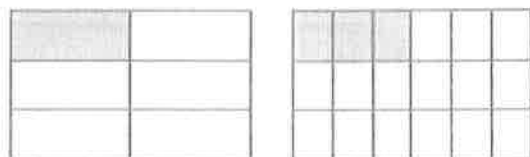
How many keys are working ?

Exercise 2

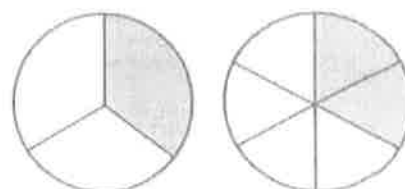
1. Use each pair of drawings below to write down the 2 fractions that are shown to be **equivalent** to each other.

<p>a</p> <div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; width: 100px; height: 100px; position: relative;"> <div style="background-color: #cccccc; width: 25px; height: 100%; position: absolute; left: 25px;"></div> </div> <div style="border: 1px solid black; width: 100px; height: 100px; position: relative;"> <div style="background-color: #cccccc; width: 25px; height: 100%; position: absolute; left: 25px;"></div> <div style="background-color: #cccccc; width: 100%; height: 25%; position: absolute; top: 0;"></div> </div> </div>	<p>b</p> <div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; width: 100px; height: 100px; position: relative;"> <div style="background-color: #cccccc; width: 100%; height: 25%; position: absolute; top: 0;"></div> </div> <div style="border: 1px solid black; width: 100px; height: 100px; position: relative;"> <div style="background-color: #cccccc; width: 25px; height: 100%; position: absolute; left: 25px;"></div> <div style="background-color: #cccccc; width: 100%; height: 25%; position: absolute; top: 0;"></div> </div> </div>
<p>c</p> <div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; width: 100px; height: 100px; position: relative;"> <div style="background-color: #cccccc; width: 25px; height: 100%; position: absolute; left: 25px;"></div> </div> <div style="border: 1px solid black; width: 100px; height: 100px; position: relative;"> <div style="background-color: #cccccc; width: 25px; height: 100%; position: absolute; left: 25px;"></div> <div style="background-color: #cccccc; width: 100%; height: 25%; position: absolute; top: 0;"></div> </div> </div>	<p>d</p> <div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; width: 100px; height: 100px; position: relative;"> <div style="background-color: #cccccc; width: 25px; height: 100%; position: absolute; left: 50px;"></div> </div> <div style="border: 1px solid black; width: 100px; height: 100px; position: relative;"> <div style="background-color: #cccccc; width: 25px; height: 100%; position: absolute; left: 50px;"></div> <div style="background-color: #cccccc; width: 100%; height: 25%; position: absolute; top: 0;"></div> </div> </div>

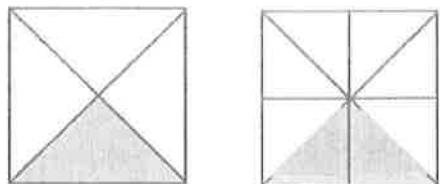
1. e



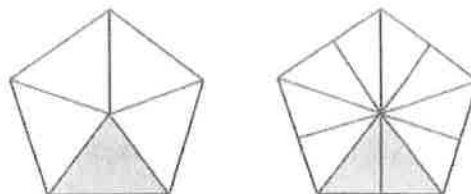
f



g

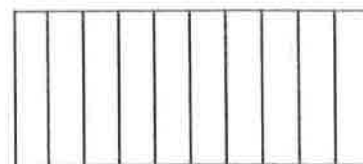
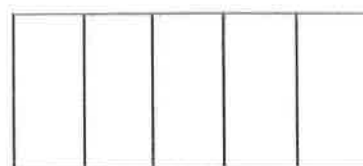


h



2. Draw or trace these figures.

- In the first one, shade or colour in 3 parts.
- What fraction have you shaded?
- Shade (or colour in) the correct number of parts in the 2nd figure so that both represent equivalent fractions.
- Use your drawings to complete :-



$$\frac{?}{5} = \frac{?}{10}.$$

Exercise 3

1. What fraction does each bit represent on each of these number lines?



2. What number is each arrow pointing to?



3. Put these two lists of fractions in order, starting with the **highest** each time.

a $\frac{1}{3}, \frac{1}{7}, \frac{1}{2}, \frac{1}{5}$.

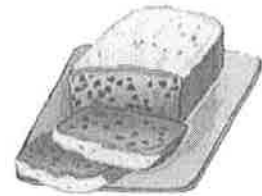
b $\frac{1}{8}, \frac{1}{10}, \frac{1}{6}, \frac{1}{15}, \frac{1}{9}$.

4. Draw a number line diagram to show the number $7\frac{3}{4}$.

Revision Exercise

1. This fruit loaf is to be cut into 7 slices.

What fraction of the loaf has already been cut?

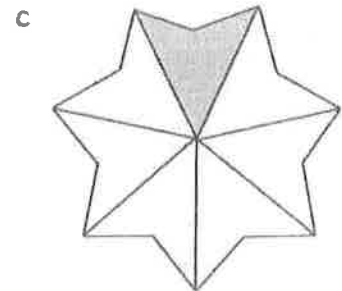
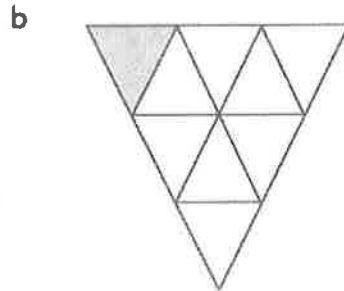
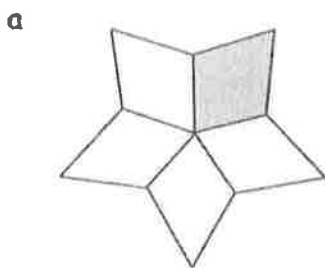


2. The cost of a night out at a restaurant is to be shared among 8 friends.

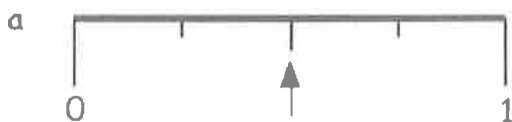
What fraction of the bill does each of them have to pay?



3. What fraction of each shape has been coloured?



4. What fraction (or number) is represented on each of these number lines?



5. What is :-

a $\frac{1}{2}$ of 48p

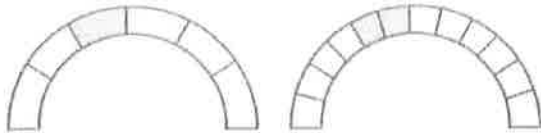
b $\frac{1}{5}$ of 75p

c $\frac{1}{9}$ of 540 cm ?

6. Each diagram below shows 2 fractions that are **equivalent**.

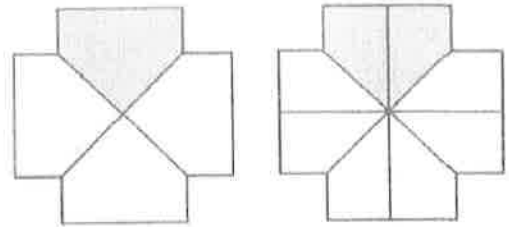
Write down what the fractions are.

a



$$\frac{1}{6} = \frac{\dots}{\dots}$$

b



$$\frac{1}{4} = \frac{\dots}{\dots}$$

7. Write down a fraction which you think is **equivalent** to $\frac{1}{7}$.

8. There are 72 mugs set out on a table at a school fete.

$\frac{1}{3}$ of them are for coffee, the rest are for tea.

a How many mugs are for coffee ?

b How many mugs are for tea ?



9. It's 60 miles by bus from my house in the country to my school.

Last Monday, my school bus had a puncture when it had only gone $\frac{1}{10}$ of the way to school.

a How far had the bus gone ?

b How far had it still to go to school ?



10.



From the birthday money he got from his gran, George spent $\frac{1}{3}$ of it on a second hand computer game.

The game cost £15.

a How much did his gran give George ?

b How much of his birthday money had he left ?

