Paper 4
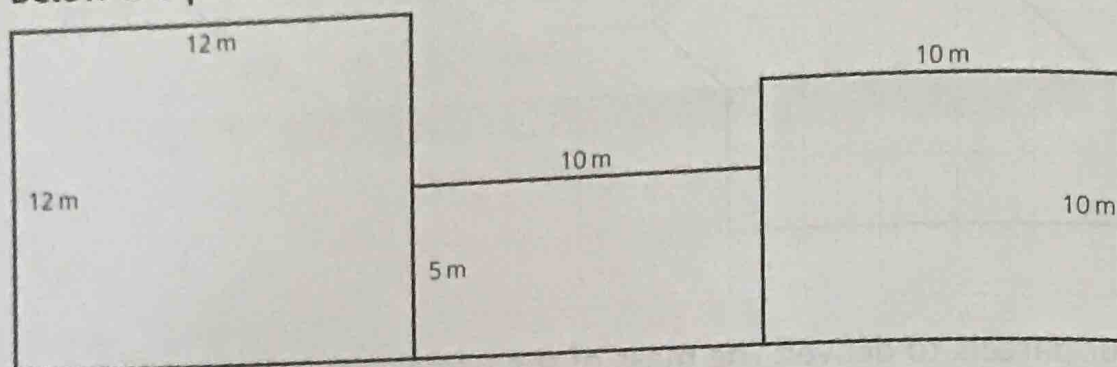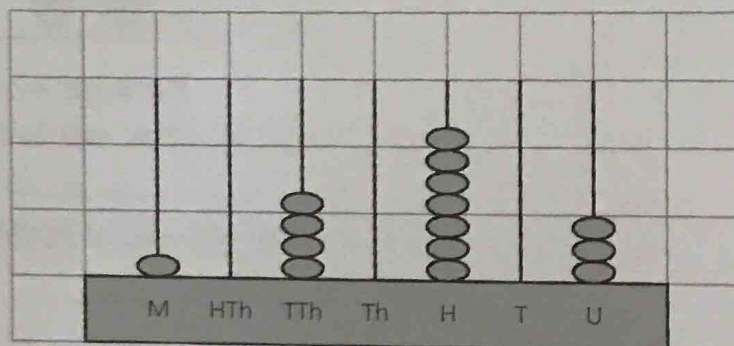
1 Below is a plan of two classrooms and a connecting corridor.

Not drawn accurately

(a) What is the perimeter of the larger classroom? _____ (1)

(b) What is the difference in area between the two classrooms? _____ (3)

(c) During the summer holidays, the caretaker tiles the classroom floors. The tiles are 25 cm × 25 cm in size. How many tiles will the caretaker need to tile the larger classroom? _____ (2)

(d) Tiles cost 10p each. How much will it cost to tile the larger classroom? _____ (1)

(e) What is the difference in cost between tiling the two classrooms? _____ (3)

2 Twickenham Stadium has 82 000 seats.
Half an hour before the start of a match, 13 484 seats were empty.

(a) How many people were in their seats? _____ (1)

(b) If only 25% of the empty seats had been sold, how many people had not yet entered the stadium? _____ (1)

(c) 8000 children watched the game. The ratio of boys to girls was 3 : 1

How many boys watched the game? _____ (2)

3 Write in words the number shown on the abacus below.

_____ (1)

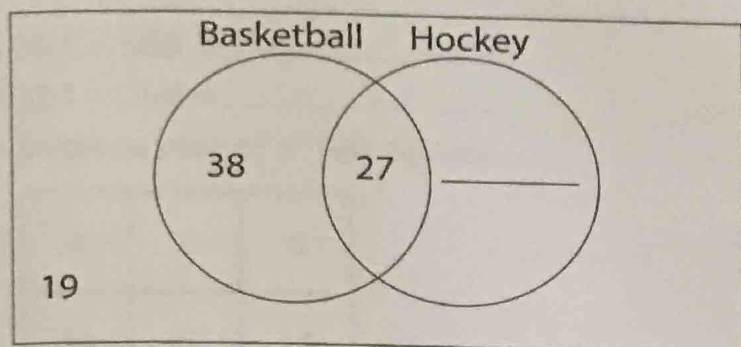**4** Write the following amounts of money in order, smallest first. (1)
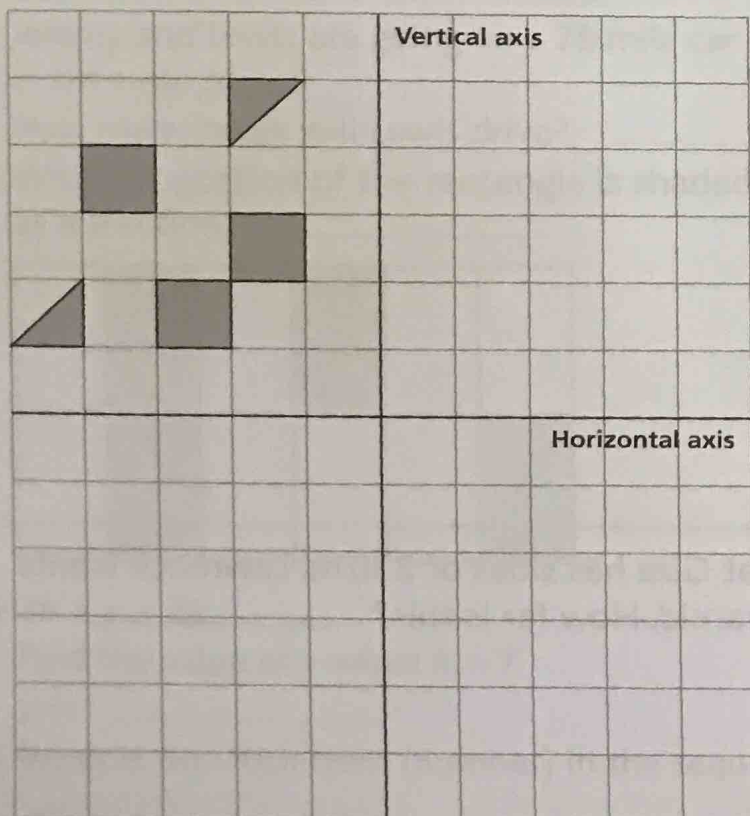
£8.67   £8.76   £6.87   £6.78   £7.86

_____   _____   _____   _____   _____

5 Azsvin asked members of his youth club about the sports they play. His results are shown in the Venn diagram below.

Basketball   Hockey

38   27   _____

19
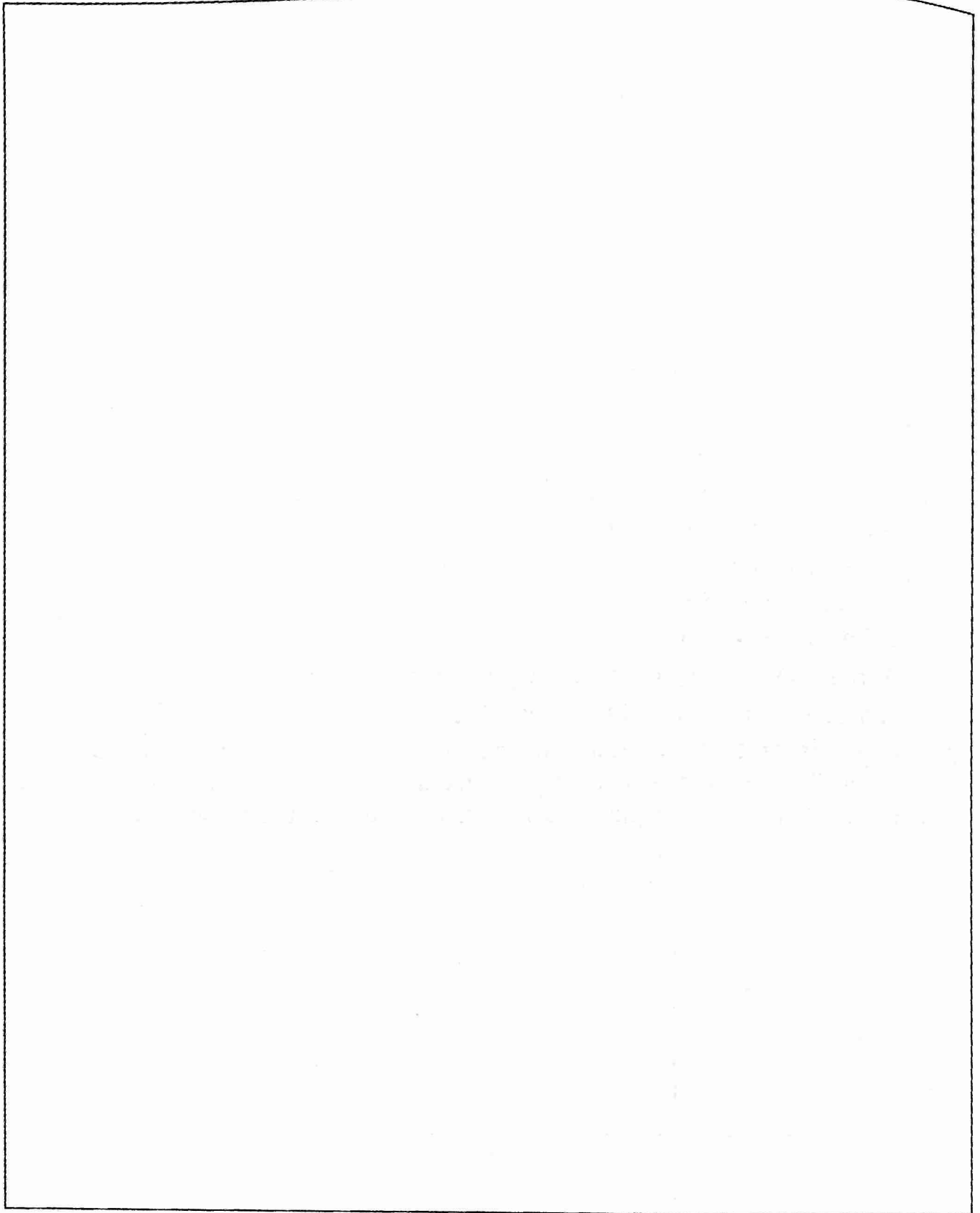
(a) How many children play both basketball and hockey? _____ (1)

(b) Altogether, 48 children play hockey. How many children play only hockey and no other sport(s)? _____ (1)

(c) How many children took part in the survey? _____ (1)

(d) How many children play basketball? _____ (1)

(e) How many children play just one sport? _____ (1)

6 Paul was thinking of a number, x. When he subtracted 5 and then multiplied by 3 the answer was 12

(a) Write down an expression to help find Paul's number. _____ (2)

(b) What number was Paul thinking of? _____ (2)

7 Mandy is decorating her bathroom. She has tiled a quarter of one wall, as shown in the diagram. She wants to reflect the pattern along the horizontal and vertical axes marked on the diagram. Colour squares to show the pattern on the finished wall. (2)

Vertical axis

Horizontal axis

Turn over to the next page

8 The Great Pyramid in Egypt is a square-based pyramid.

    (a) Draw the net of a square-based pyramid below.   **(1)**

    (b) The base of the Pyramid of Khufu at Giza has sides of 230 m. Lawrence wants to walk around the base of this pyramid. How far is this? _____ **(1)**