**7** This diagram shows parts of four reflection patterns.



mirror line
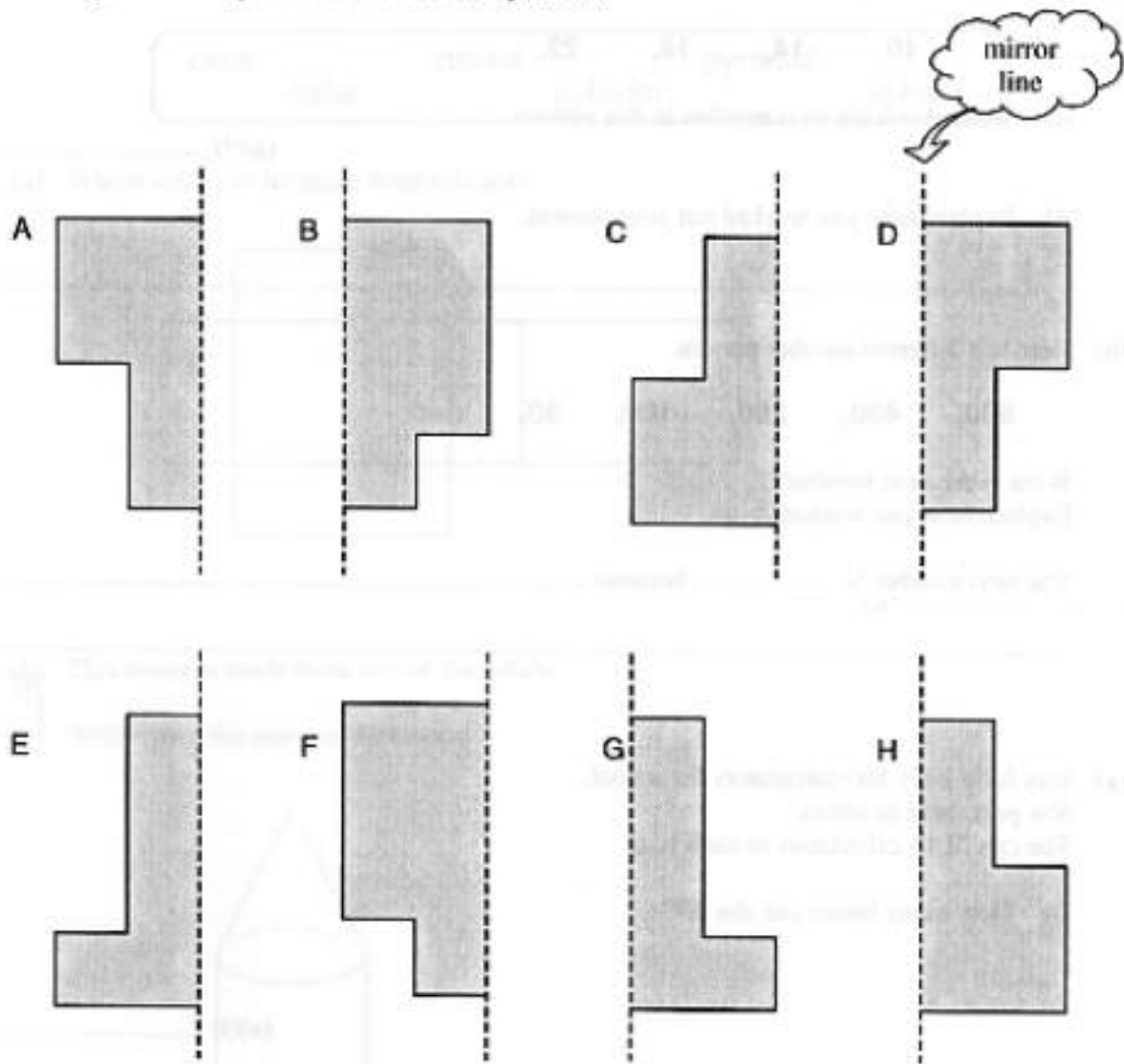
Find the matching pairs.

A     matches with    .....

.....     matches with    .....

.....     matches with    .....

.....     matches with    .....

[2]

[Turn over

8 (a) Here is a number pattern.

   **6,    10,    14,    18,    22,    ...**

   (i) Write down the next number in this pattern.

   (a)(i) .................................[1]

   (ii) Explain how you worked out your answer.

   ...............................................................................................................................................................[1]

(b) Here is a different number pattern.

   **800,    400,    200,    100,    50,    ...**

   What is the next number?
   Explain how you worked it out.

   The next number is .................... because ...............................................................................................

   ...............................................................................................................................................................[2]

   [4]

9 (a) Mrs Jolly buys 100 calculators for school.
   She puts them in boxes.
   She can fit 15 calculators in each box.

   (i) How many boxes can she fill?

   (a)(i) .................................[1]

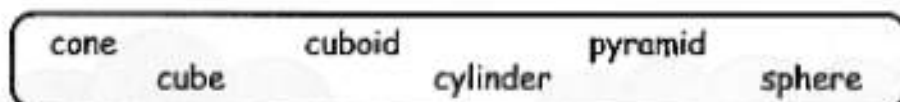   (ii) How many calculators will be left over?

   (ii) .................................[1]

(b) Mrs Jolly buys 5 graphical calculators.
   They cost £137·25 altogether.

   Work out the cost of 1 graphical calculator.

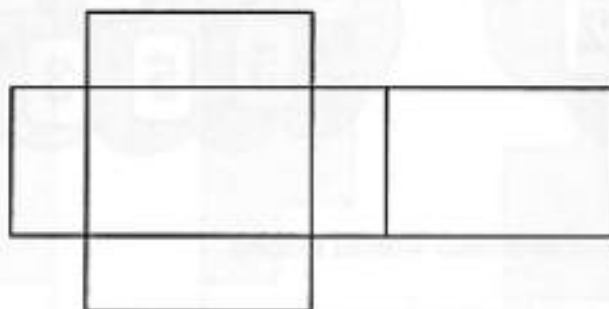   (b)£.................................[2]

   [4]

10 Use this list of solids to answer these questions.

> cone         cuboid        pyramid
> cube         cylinder        sphere

(a) Which solid can be made from this net?

(a) ...................................[1]

(b) This tower is made from two of the solids.

Write down the name of each solid.

.............................................. [1]

.............................................. [1]

[3]

11  Ben and Luke are playing a card game.



Ben's cards: 2  4  2  4  2  2  6

Luke's cards: 1  5  4  2  5  5  3
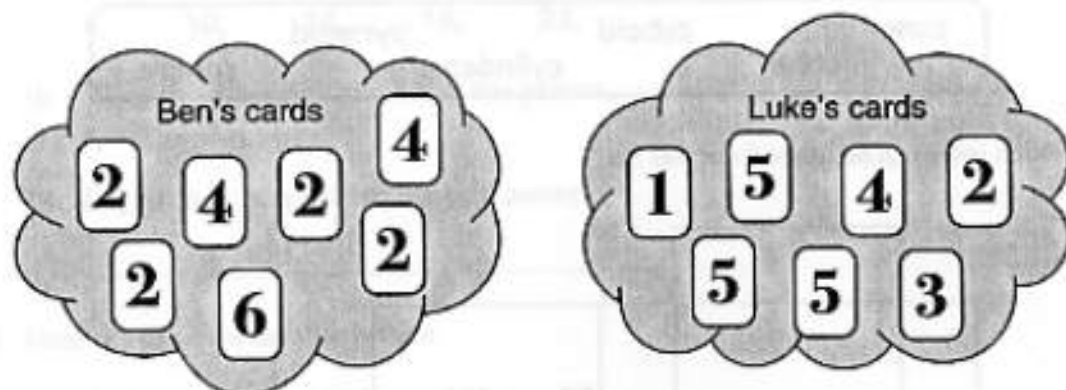
(a) Ben and Luke each choose one of their cards without looking.

(i)  Use a probability word to complete this sentence.

It is ........................................ that Ben will choose a 6.                    [1]

(ii) Using arrows labelled B and L, mark on the line the probability of each of these events.

   B: Ben chooses a 2.
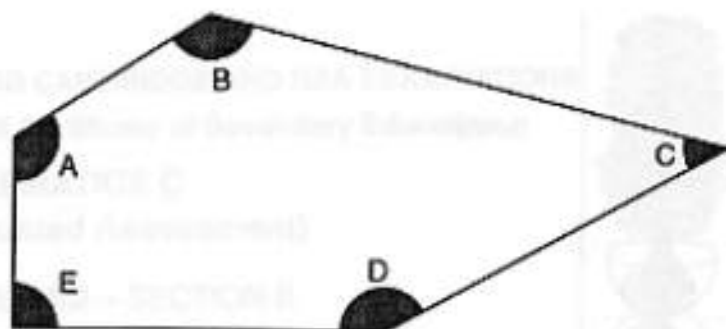   L: Luke chooses a 2.

   0 |_____| 1                                              [2]

(b) They play a game and Luke records his scores.
   Here are his results.

   25    30    25    35    40    5    25    50    30

   Find the median score.

   (b) ...........................................[2]

   [5]

12



(a) Put the letters in the correct spaces in this table.

| right angle | acute angle | obtuse angle | reflex angle |
|---|---|---|---|
|  |  |  |  |

[3]

(b) Name the shape drawn inside this circle.



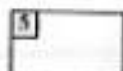(b)..................................[1]

(c) Draw a pentagon inside this circle.



[1]

5
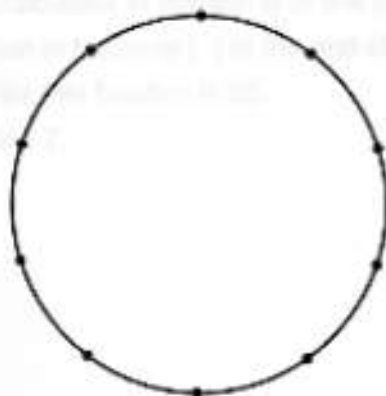
**TURN OVER FOR QUESTION 13**

13  The flower is 15 cm tall.
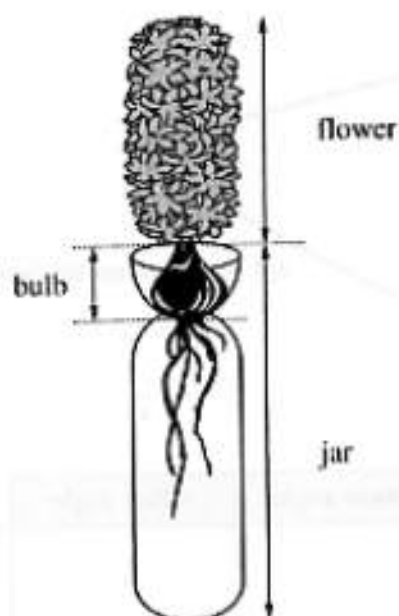


(a)  Estimate the height of the bulb.

(a)...............................cm [1]

(b)  Estimate the height of the jar.

(b) ...............................cm [1]

2