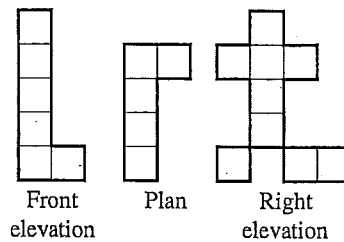


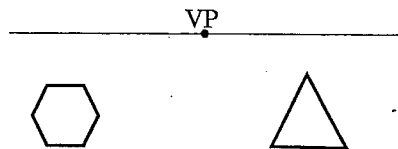
## A Geometric: Drawing diagrams of solids

Skill 6.7

- 1 Make an isometric drawing to represent the structure shown in this plan and elevation diagram.



- 2 Complete a one-point perspective drawing of these hexagonal and triangular prisms:



## B Algebra: Constructing practical equations

Skill 3.13

Set up an equation and solve it to complete the question:

- If my science test score was twelve less than my maths test score and together I scored 138 marks, what was the score in each subject?
- The width of a rectangular block of land is 5 metres shorter than its length. If the perimeter of the block is 50 metres find its length and width.

## C Cartesian plane: Simultaneous equations

Skill 5.5

Solve these simultaneous equations using algebraic techniques and sketch each pair on the same set of axes to check where they cross.

- |                |               |
|----------------|---------------|
| 1 $y = 2x + 5$ | 2 $y + x = 4$ |
| $y = -x + 8$   | $x - y = -2$  |

## D Geometry: Describing properties of solids

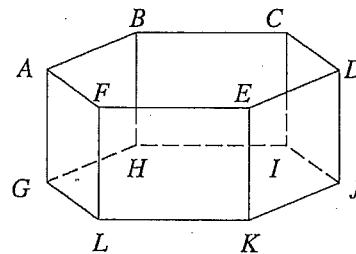
Skill 6.6

- List all the faces parallel to the plane of:
 

|            |            |              |
|------------|------------|--------------|
| (a) $ABGH$ | (b) $BCHI$ | (c) $ABCDEF$ |
| (d) $AFGL$ |            |              |

 List all the faces perpendicular to the plane of:
 

|              |
|--------------|
| (e) $ABCDEF$ |
|--------------|



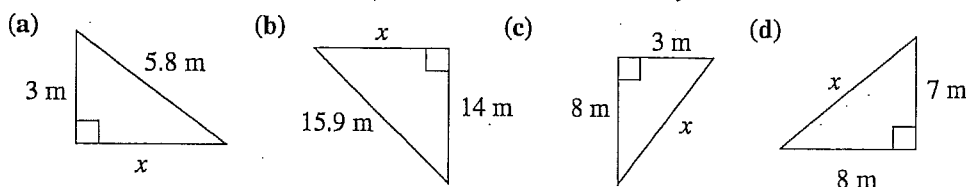
- Draw the cross-sections parallel to, and perpendicular to, the base of:
 

|                            |          |                              |
|----------------------------|----------|------------------------------|
| (a) triangular-based prism | (b) cube | (c) pentagonal-based pyramid |
|----------------------------|----------|------------------------------|

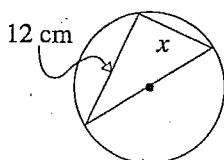
## E Measurement: Pythagoras' theorem in two dimensions

Skill 7.1

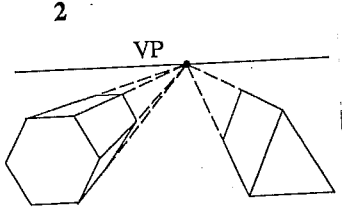
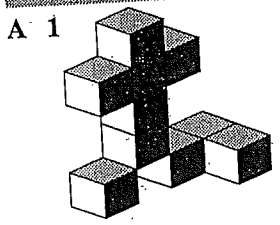
- 1 Find the missing lengths to two decimal places where necessary:



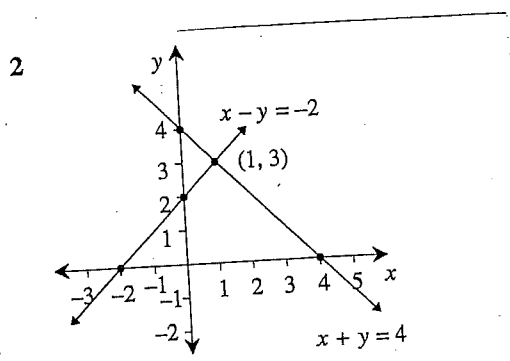
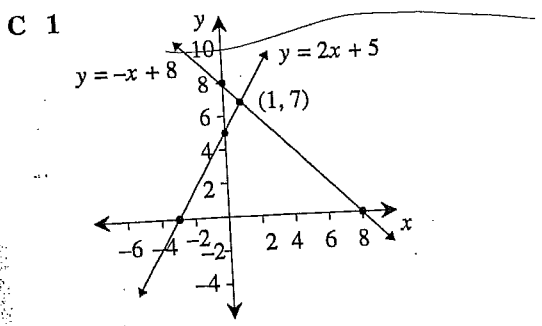
- 2 Find the length marked  $x$  in this circle whose radius is 10 cm:



**Worksheet 20**



B 1 Maths 75      2 length = 15 m  
 Science 63      width = 10 m



D 1 (a) EDKJ                      (b) EFLK  
 (c) GHIJKL                    (d) CDIJ  
 2 AFGL, ABGH, BCHI, CDIJ, EDKL, EFLK

3      Parallel                      Perpendicular

(a)               

(b)     

(c)     

E 1 (a) 4.96 m                      (b) 7.54 m  
 (c) 8.54 m                      (d) 10.63 m  
 2 16 cm