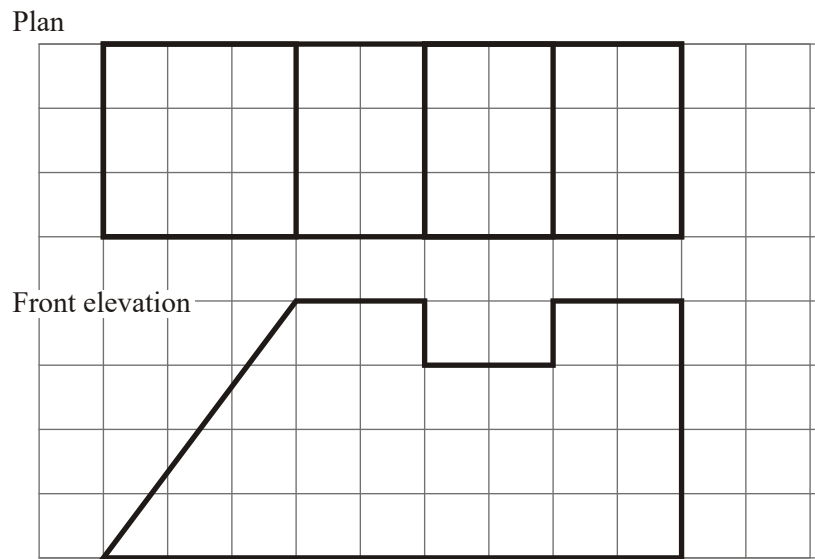
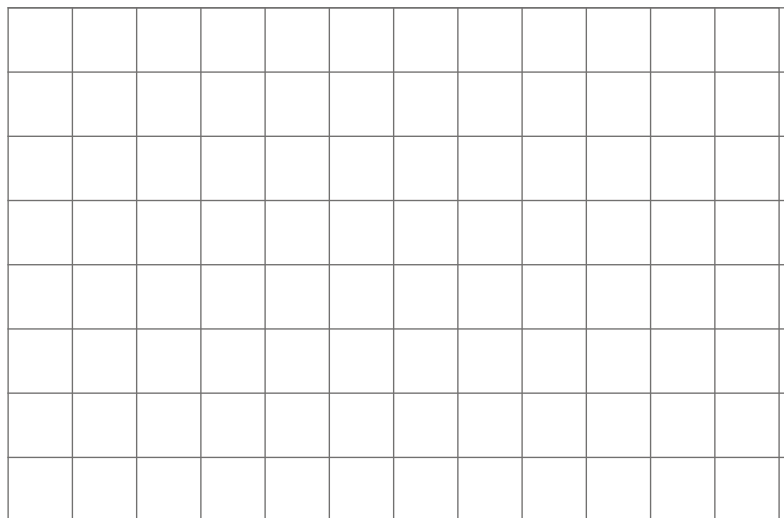


1. Here are the plan and front elevation of a prism.
The front elevation shows the cross section of the prism.



- (a) On the grid below, draw a side elevation of the prism.

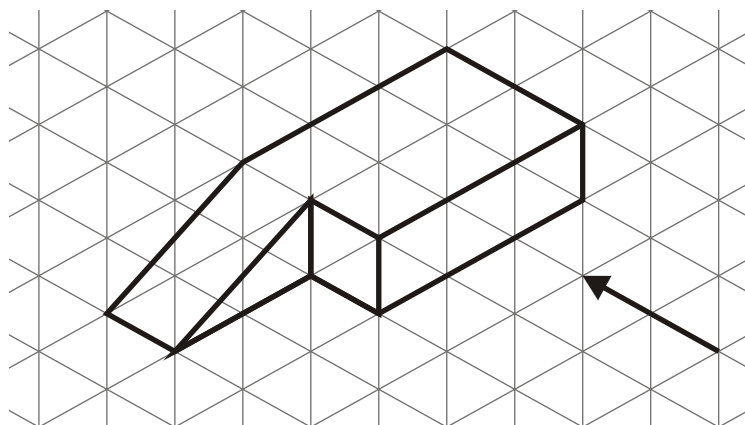


(3)

(b) In the space below, draw a 3-D sketch of the prism.

(2)
(Total 5 marks)

2. The diagram shows a solid object.



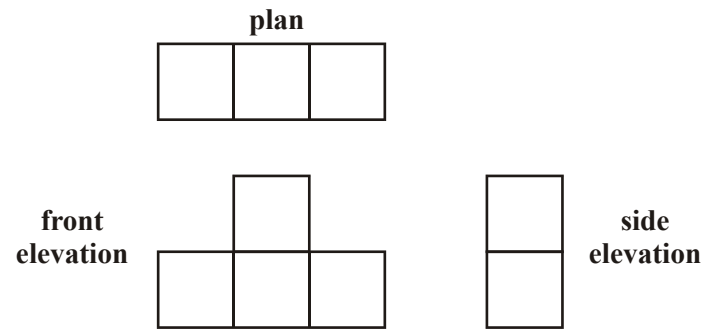
- (a) In the space below, sketch the front elevation from the direction marked with an arrow.

(2)

- (b) In the space below, sketch the plan of the solid object.

(2)
(Total 4 marks)

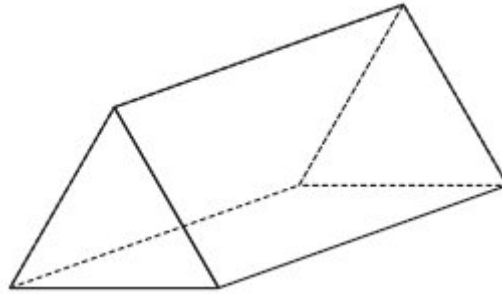
3. Here are the plan, front elevation and side elevation of a 3-D shape.



In the space below, draw a sketch of the 3-D shape.

(Total 2 marks)

4.



The diagram shows a triangular prism.

The cross-section of the prism is an equilateral triangle.

(a) On the diagram, draw in **one** plane of symmetry for the triangular prism.

(2)

(b) In the space below, draw a sketch of a net for the triangular prism.

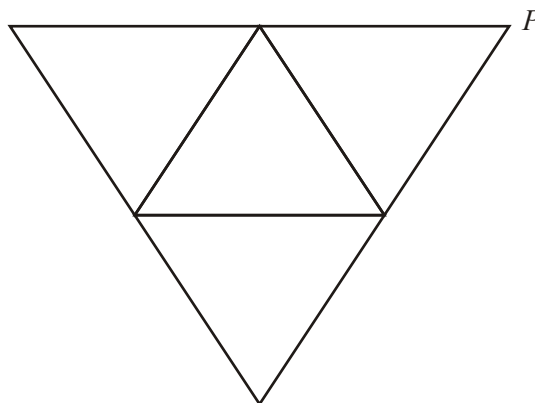
(2)

- (c) In the space below, use ruler and compasses to **construct** an equilateral triangle with sides of length 6 centimetres.
You must show all construction lines.
One side of the triangle has already been drawn for you.



(2)
(Total 6 marks)

5. Here is the net of a 3-D shape.

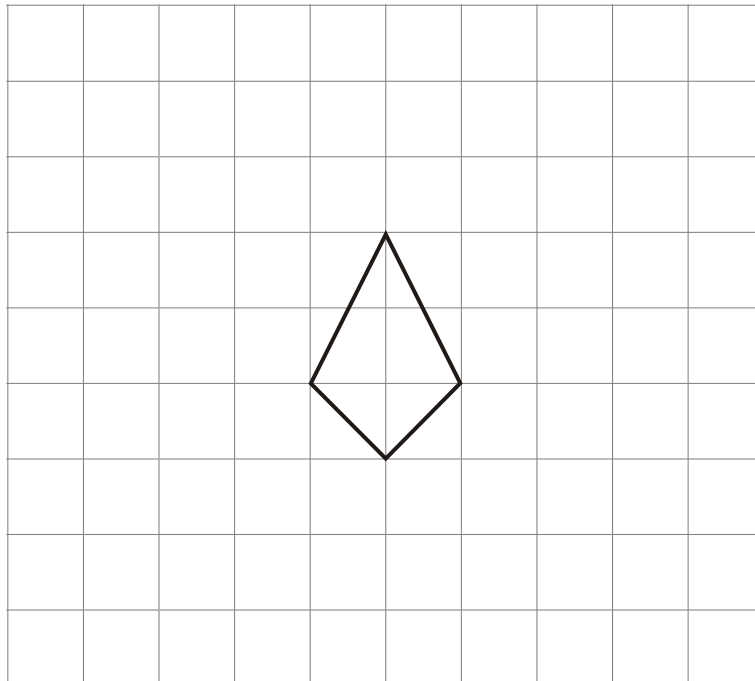


The net is folded to make the 3-D shape.
Two other vertices meet at P .

Mark each of these vertices with the letter P .

(Total 2 marks)

6. On the grid, show how this kite will tessellate.
You should draw at least 8 kites.



(Total 2 marks)

7. The diagram shows a sketch of a solid object.
The solid object is made from five centimetre cubes.

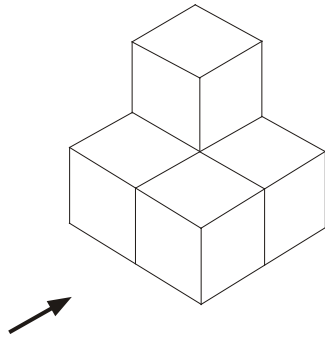
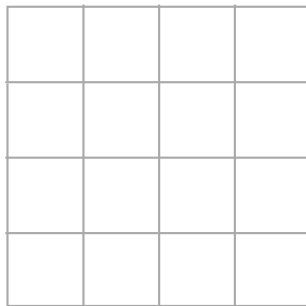


Diagram **NOT** accurately drawn

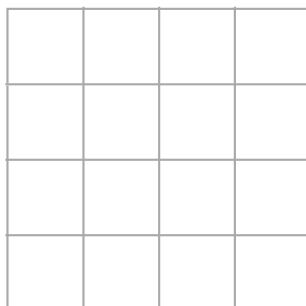
- (a) On the grid of centimetre squares, draw the elevation of the solid object in the direction marked with an arrow.



Elevation

(2)

- (b) On the grid of centimetre squares, draw the plan of the solid object.



Plan

(2)
(Total 4 marks)

8.

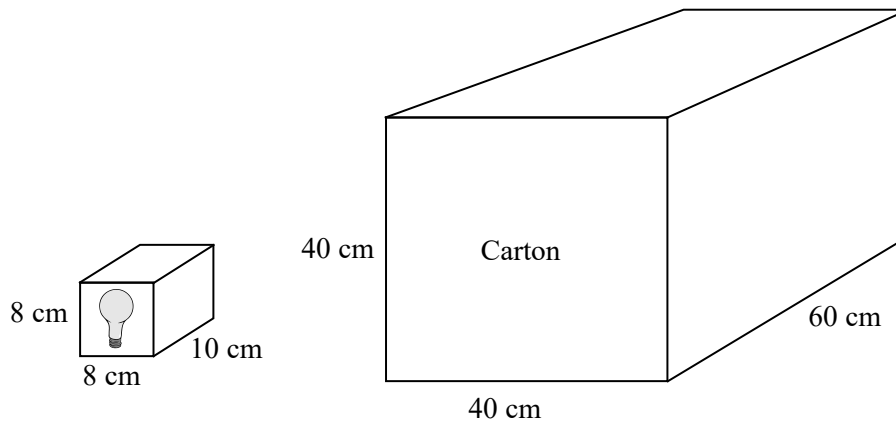


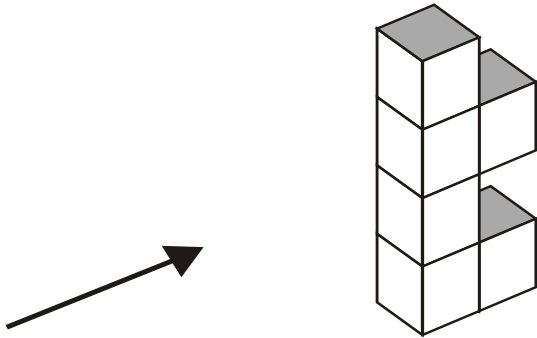
Diagram **NOT**
accurately drawn

A light bulb box measures 8 cm by 8 cm by 10 cm.
Light bulb boxes are packed into cartons.
A carton measures 40 cm by 40 cm by 60 cm.

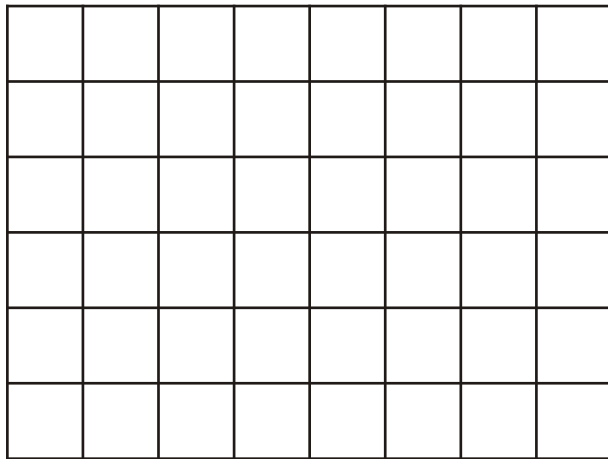
Work out the number of light bulb boxes which can completely fill **one** carton.

.....
(Total 4 marks)

9. The diagram shows a solid object made of 6 identical cubes.

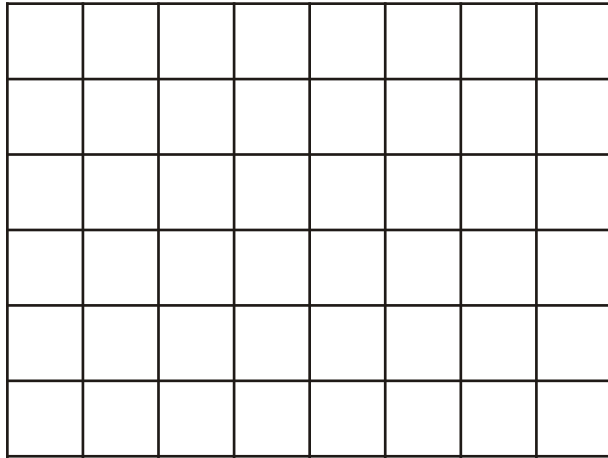


- (a) On the grid below, draw the side elevation of the solid object from the direction of the arrow.



(2)

(b) On the grid below, draw the plan of the solid object.



(2)
(Total 4 marks)

10.

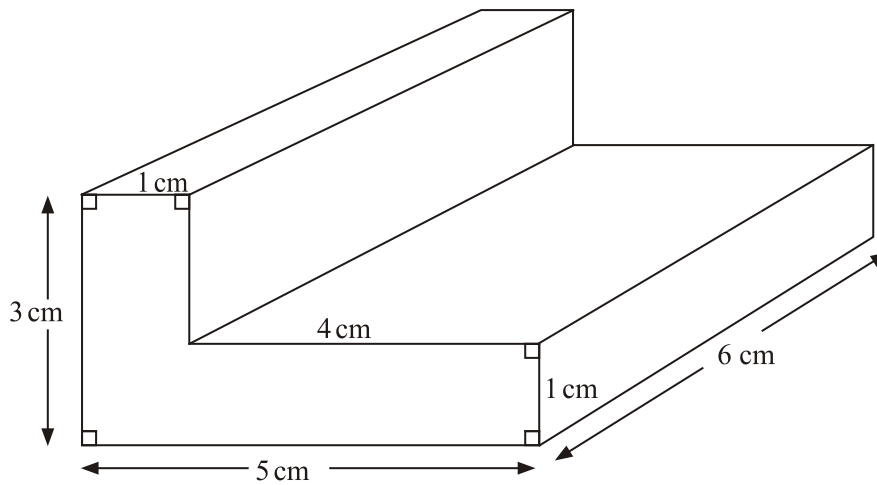
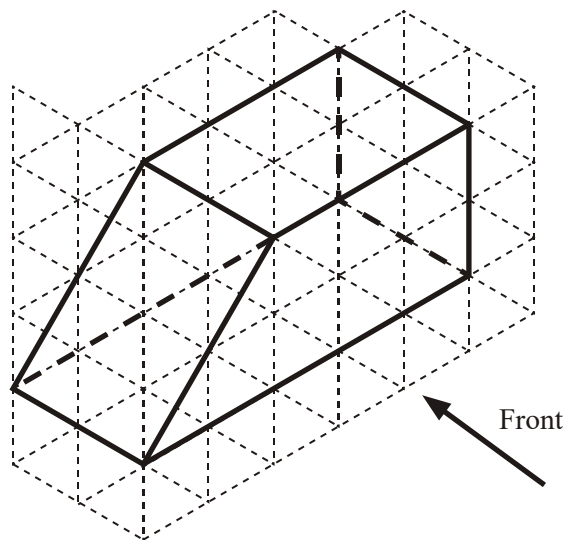


Diagram NOT
accurately drawn

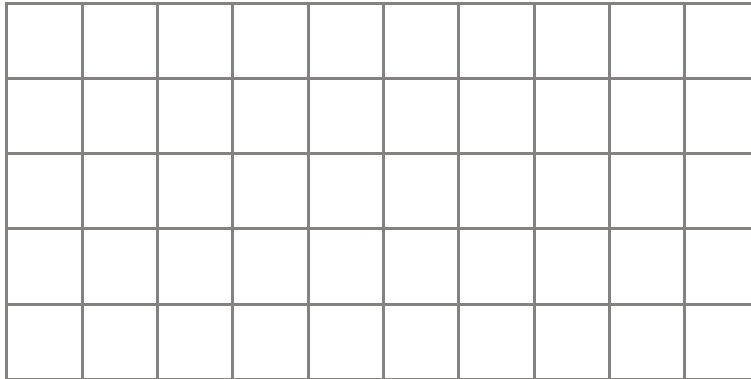
Work out the total surface area of the L-shaped prism.
 State the units with your answer.

.....
 (Total 4 marks)

11. The diagram shows a prism drawn on a centimetre isometric grid.

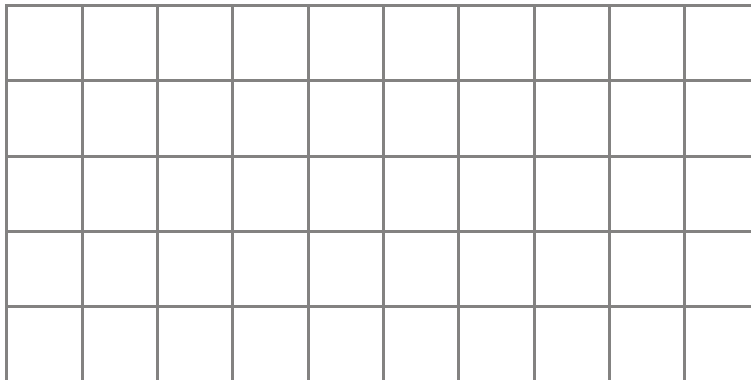


- (a) On the centimetre grid, draw the front elevation of the prism from the direction marked by the arrow.



(2)

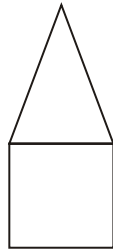
- (b) On the centimetre grid, draw a plan of the prism.



(2)
(Total 4 marks)

12. Here are the front elevation, side elevation and the plan of a 3-D shape.

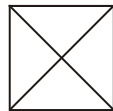
Front elevation



Side elevation



Plan



In the space below, draw a sketch of the 3-D shape.

(Total 2 marks)

13.

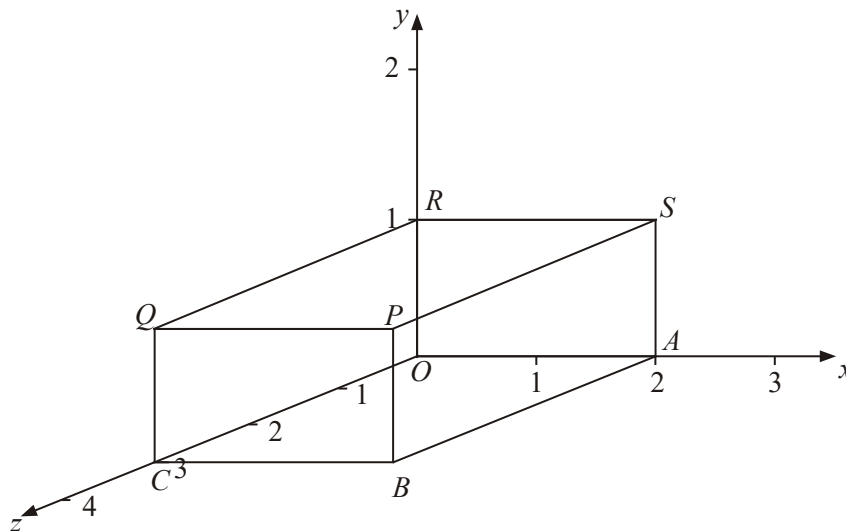


Diagram **NOT** accurately drawn

A cuboid is shown on a 3-dimensional grid.

(a) Write down the letter of the point with coordinates (2, 1, 0).

.....

(1)

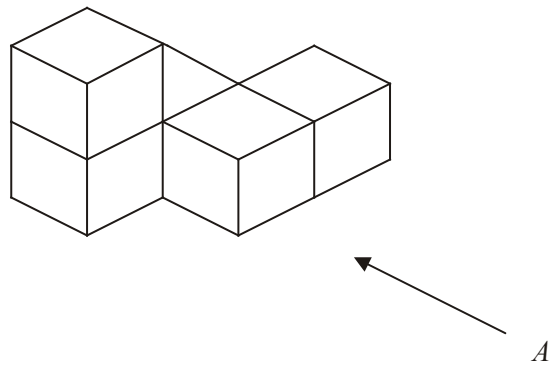
(b) Write down the coordinates of the point *P*.

(..... , ,)

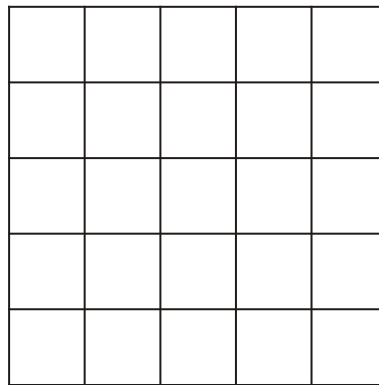
(1)

(Total 2 marks)

14. The diagram represents a solid made from 5 identical cubes.



On the grid below, draw the view of the solid from direction *A*.



(Total 2 marks)

- 15.

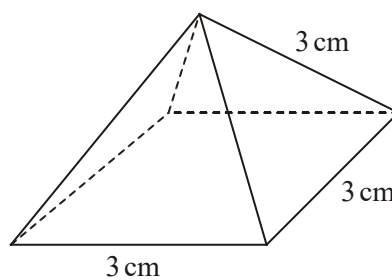


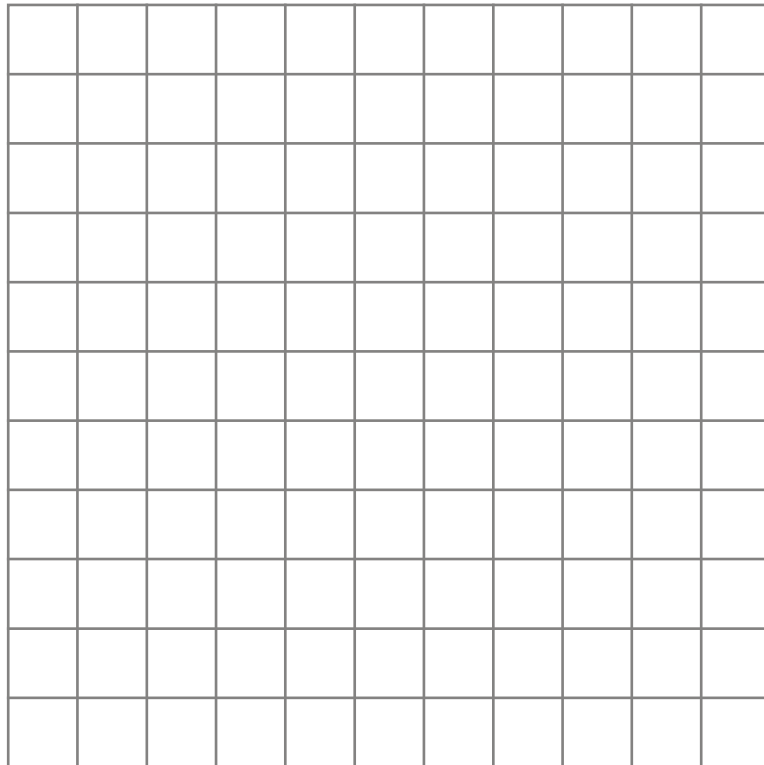
Diagram **NOT** accurately drawn

The diagram shows a pyramid with a square base.

The length of each side of the base is 3 cm.

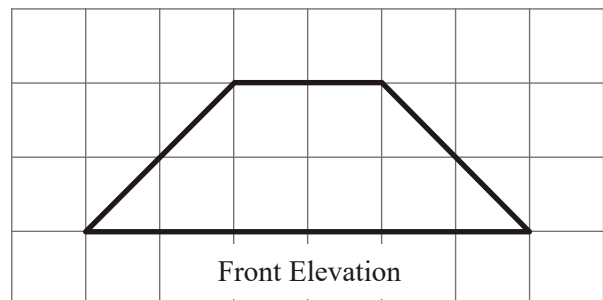
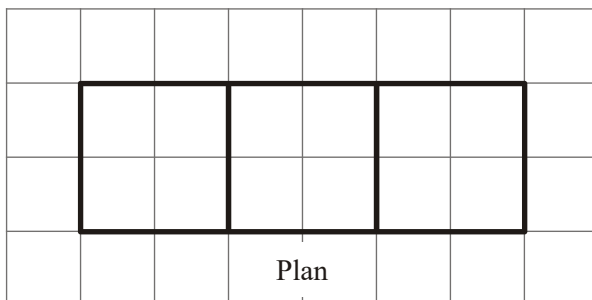
The length of each sloping edge is 3 cm.

On the grid of centimetre squares, draw an accurate net of the pyramid.

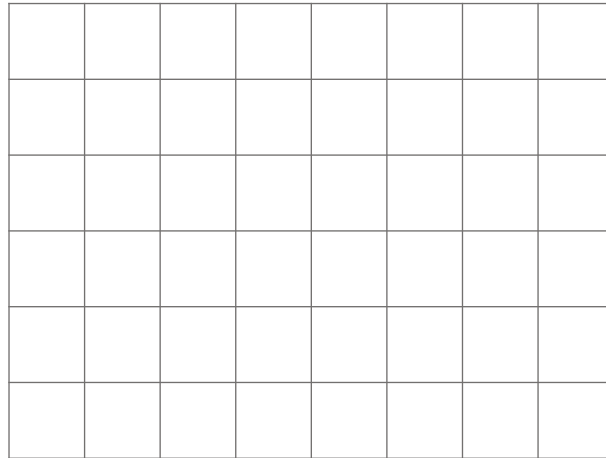


(Total 3 marks)

16. Here are the plan and front elevation of a solid shape.



- (a) On the grid below, draw the side elevation of the solid shape.



(2)

- (b) In the space below, draw a sketch of the solid shape.

(2)
(Total 4 marks)

17. The diagram shows a solid object made from centimetre cubes.

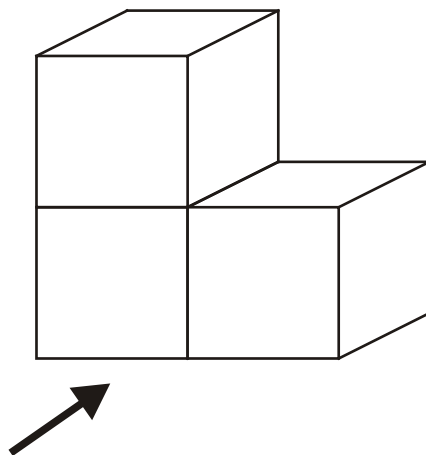


Diagram **NOT**
accurately drawn

- (a) In the space below, sketch the front elevation of the solid object from the direction marked with an arrow.

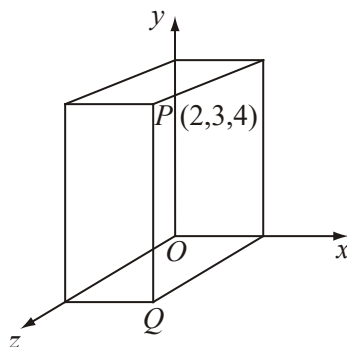
(2)

- (b) In the space below, sketch a plan of the solid object.

(2)

(Total 4 marks)

18. A cuboid is shown on a 3-D grid.

Diagram **NOT** accurately drawn

The point P has the coordinates $(2, 3, 4)$.

The coordinates of the point Q are

 $(2, 3, 0)$ $(0, 3, 4)$ $(0, 0, 4)$ $(2, 0, 0)$ $(2, 0, 4)$ **A****B****C****D****E**

(Total 1 mark)

19. The diagram shows a cuboid.

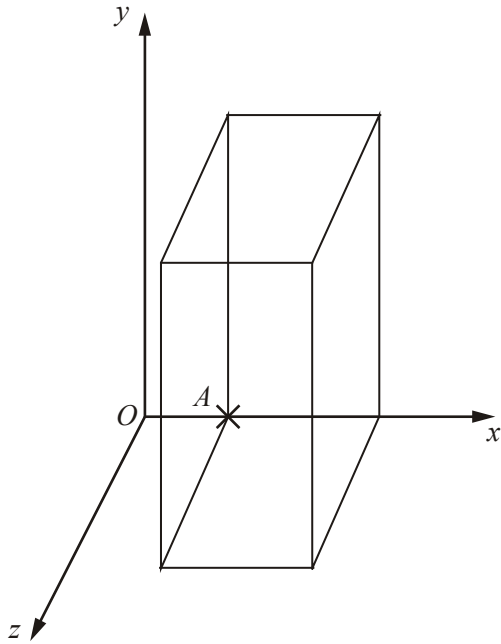


Diagram **NOT** accurately drawn

Three of the vertices of this cuboid are

$$A(2, 0, 0) \quad B(5, 0, 0) \quad C(2, 6, 0)$$

The point A is shown on the diagram.

On the diagram mark with a cross (X) and label the two vertices B and C .

(Total 2 marks)

20. A cuboid is drawn on a 3-D grid.

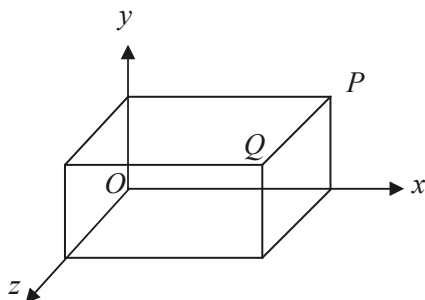


Diagram **NOT** accurately drawn

The point Q has coordinates $(3, 1, 2)$.

The coordinates of the point P are

$(3, 1, 0)$

$(3, 0, 2)$

$(0, 1, 2)$

$(3, 2, 0)$

$(2, 1, 3)$

A

B

C

D

E

(Total 1 mark)

- 21.

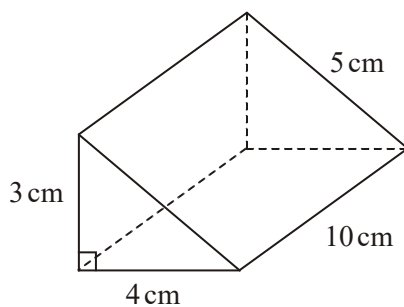


Diagram **NOT** accurately drawn

What is the total surface area of the triangular prism?

60 cm^2

132 cm^2

144 cm^2

120 cm^2

600 cm^2

A

B

C

D

E

(Total 1 mark)

1. (a)  dotted line
may be solid 3

*B2 for rectangle base 3 squares and height 4 squares
(B1 for rectangle with one correct dimension)
B1 for horizontal line 1 cm from top)
SC B2 for completely correct elevation on its side*


- (b)  2

*B2 for perspective drawing showing slant face and cutout
B1 for perspective drawing with either slant face cutout omitted*

[5]

2. (a)  2

*B1 B1 for correct sketch – ignore additional internal lines
B1 B0 for rectangle or right-angled triangle or correct shape
without line
NB 3-D sketch gets B0 B0*

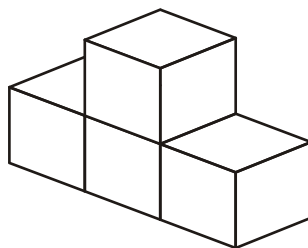
- (b)  2

*B1 B1 for correct plan – ignore internal lines –accept a rotated
plan, not reflected
B1 B0 for a single rectangle drawn
NB 3-D sketch gets B0 B0*

[4]

3. correct drawing

2



B2 Condone hidden detail shown with solid lines and missing lines on front face

*(B1 for a correct sketch with other incorrect sketch(es)
or for prism with correct cross section > 1 cube wide
or for attempt to draw prism with correct cross section
or prism with correct plan and side elevation)*

[2]

4. (a) Correct plane

2

*B2 for a correct plane defined by showing at least 2 lines.
(B1 for a line of symmetry on one face)*

(b) Correct net

2

*B2 cao
(B1 for 2 equilateral triangles joined appropriately to at least one rectangle or for 1 equilateral triangle joined appropriately to one of 3 rectangles)*

(c) Correct drawing

2

*B1 for two extra sides of length 6cm ($\pm 2mm$)
B1 for construction arcs 6cm from each of the ends of the given line.*



[6]

5. P marked at top left and bottom

2

*B2 for both correct
(B1 for one correct)
(-B1 for each error if more than 2Ps)*

[2]

6. 2
- B2 for fully correct with 5 or more additional kites
(B1 for a tessellation of 4 kites, 2 of which must be inverted,
ignore remainder of diagram)*
- [2]**
-
7. (a)  2
- B2 for elevation with correct orientation
(B1 incorrect orientation)*
-
- (b)  2
- B2 for correct plan; internal square can be in any corner.
(B1 for 2 by 2 square with missing/extra internal lines)*
- [4]**
-
8. $5 \times 5 \times 6 = 150$ 4
- M1 for attempt at 1 division (e.g. $40 \div 8$), may be implied by
marks or number on one edge of diagram or by 5 or 6 seen*
- M1 for attempt at 3 divisions ($40 \div 8$, $40 \div 8$, $60 \div 10$), may be
implied by marks or numbers on diagram or by 5, 5 and 6
seen.*
- M1 (dep on 1st M1) for “5” × “5” × “6”*
A1 cao
- Alternatively*
M1 for $40 \times 40 \times 60$ or $8 \times 8 \times 10$ or 96000 or 640 seen
M1 for $40 \times 40 \times 60$ and $8 \times 8 \times 10$ or 96000 and 640 seen
M1 (dep on 1st M1) for “($40 \times 40 \times 60$)” ÷ “($8 \times 8 \times 10$)”
A1 cao
- SC:B1 for dividing area of one carton face by area of
corresponding box face if M0*
- [4]**

9. (a)



Elevation

2

*B2 for 4 vertical squares. Accept 4 by 1 rectangle.
(B1 for 4 vertical squares with one square added or one parallelogram added at the top, or 3 vertical squares, or 4 horizontal squares)*

(b)



Plan

2

*B2 for 2 adjacent squares, vertical or horizontal. Accept 2 by 1 rectangle.
(B1 for 3 adjacent horizontal or vertical squares or a rectangle with sides in the ratio 2:1)*

[4]

$$10. \quad 2 [(3 \times 1) + (4 \times 1)] + (3 \times 6) + (1 \times 6) + (2 \times 6) + (4 \times 6) + (1 \times 6) + (5 \times 6) = 110 \text{ cm}^2$$

4

*M1 for attempt to find the area of one face
M1 for at least 6 faces with intention to add
A1 cao
B1 (indep) for cm^2 (with or without numerical answer)*

[4]

11. (a)

2

*B2 for trapezium (base 5cm, ht 2cm & top 3cm)
(B1 for a trapezium with exactly two right angles)*

(b)

2

B2 for rectangle with length 5 cm and width 2 cm and a line at 3 cm from one edge

(B1 for rectangle of length 5 cm or width 2 cm or for a rectangle with an interior line parallel to the shorter sides do not accept a square)

(B0 for nets)

Note: orientation must be correct in (a), ignore in (b)

Do not accept extra lines in (a) or (b)

[4]

12. Sketch

2

B2 complete 3-D sketch

(B1 for partial 3-D sketch e.g. pyramid or base only, or a shape with a box and 2 pyramids either end)

NB: If more than one shape is shown:

For 2 marks there should be no choices or alternatives other than those also worth 2 marks; if there are several diagrams of which at least one is worth 1 or 2 marks, award B1.

2D diagrams get B0.

[2]

13. (a) S

1

B1 for S cao

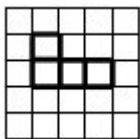
(b) (2, 1, 3)

1

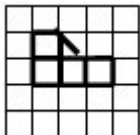
B1 for (2, 1, 3) cao

[2]

14.



OR



2

*B2 For either answer
 (B1 for an “L” shape with one dimension correct)
 Internal lines need not be drawn.
 All 3-D drawings get B0*

[2]

15. (Net)

3

*B3 for fully correct net
 (B2 for 3 or 4 out of 5 drawn faces (of 4 triangles and one quadrilateral) correct
 OR correct square and 4 isosceles triangles that together form the net of a pyramid)
 (B1 for 1 or 2 out of 5 drawn faces correct)*

[3]

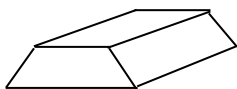
16. (a)



2

*M1 rectangle with either correct width or height or any square
 A1 cao*

(b)



2

*B2 for a correct sketch
 (B1 any 3-D sketch of no more than 4 faces seen, with a trapezoidal face)*

[4]

17. (a)



2

*B2 for correct elevation
(B1 for rectangle or elongated L)*

(b)



2

*B2 for correct plan
(B1 if centre line missing)*

[4]

18. E

[1]

19. *B* is the vertex on the *x*-axis, adjacent to *A*
C is the vertex directly above *A*.

2

*B2 for points B and C correctly marked
(B1 for 1 point correctly marked)
[SC: B1 for correct points plotted but not labelled.]*

[2]

20. A

[1]

21. B

[1]

1. Mathematics A

Paper 1

In the first part, a sizeable minority drew a rectangle with the correct dimensions, which earned 2 marks out of 3, but the hidden detail line required for the final mark was rarely present. In the second part, considerable tolerance was exercised by examiners. Some candidates produced excellent drawings but both marks were awarded for a perspective drawing showing the two key features of the sloping face and the cutout, even if there were errors in the drawing.

Consequently, a substantial number of candidates received full marks. Sketches of triangular prisms and, to a lesser extent, pyramids appeared regularly but were not rewarded. Interestingly, there was little correlation between candidates' marks on this question, especially the 3-D sketch, and their performance on the paper as a whole.

Paper 3

Reponses to this question were centre-dependent. Most candidates obtained 2 marks for a correctly drawn rectangle outline. It was very rare to see the hidden (usually dashed) line shown. It is hoped that candidates will have greater success once this becomes a more familiar topic. It was encouraging to see the many attempts at the 3-D sketch, most earning full marks. Common errors included a failure to show the depression on both sides of the sketch, or a failure to show a sloping edge. A minority of candidates drew 3-D shapes that failed to relate to the elevation, such as cylinders, triangular prisms or pyramids.

Mathematics B Paper 16

Very many candidates scored well on this question often gaining 4 out of the 5 marks available. In part (a) a correctly positioned rectangle was the usual answer without a dotted line to indicate the hidden detail. Weaker candidates often misunderstood this question and drew a parallelogram or the front elevation or, in some cases, the 3-D sketch required in part (b). In part (b) most candidates made valiant efforts to sketch the prism and usually gained both marks for showing the sloping face and the cut out.

2. Mathematics A

Paper 2

Only a minority of candidates sketched both views successfully. The front elevation was better understood than the plan and drawn correctly much more often. 3-D drawings or nets appeared regularly as the answer to part (b).

Paper 4

Success on this question was largely centre-based, indicating that in some centres this topic might not have been covered in any depth. 3D diagrams, of which there were many, immediately gained no marks. Success was higher in part (a), probably because the arrow on the diagram gave a strong indication as to what was required. In part (b) there were many attempts at drawing a net, which was clearly incorrect.

Mathematics B**Paper 15**

This is a relatively new topic on the foundation syllabus and it was clear that many candidates had no idea of plans and elevations. Most candidates attempted the question, with some degree of success. Those who had no idea of these concepts tried to reproduce the 3-D diagram in both parts, scoring no marks. Others attempted to draw nets for the diagrams. Of those candidates with some idea, many lost marks by drawing a parallelogram instead of a triangle in part (a) and/or by adding an incorrect shape in (b).

Paper 17

In part (a) a correct trapezium was often seen, sometimes without the interior line (which lost a mark). Additional interior lines were condoned and there was no marks lost for incorrect proportion in terms of size of rectangle and triangle.

Part (b) was less well done with a significant number of candidates offering a plan plus all other elevations. Unworkable nets and rectangles with a parallelogram attached were common errors. A number of candidates merely attempted to re-draw the 3-D projection.

3. Specification A**Foundation Tier**

There were many good attempts with some candidates producing excellent drawings of the solid. Although a sketch was asked for, candidates should be encouraged to use a ruler for this kind of question. Common errors included nets of the solid or of a single cube while some simply drew a cube. Others earned a mark for a prism with the correct cross-section but the wrong depth, usually 2 cubes. It was noticeable that some of the incorrect solids had more than four cubes.

Intermediate Tier

Most candidates gained at least one mark for a 3D drawing, with many gaining both marks. A significant number spoiled their drawing in some way, sometimes by adding far too many lines or cubes, or by giving a diagram that was illegible. The main error was in giving an elongated shape with a correct cross-section.

Specification B**Foundation Tier**

Drawing a 3-D sketch did not always appear to have been previously experienced by the candidates with many single cubes drawn or nets of cubes. Candidates were obviously engaged by this task and the sheer variety of answers highlights the fact that many students find it difficult to present 3-D sketching with real accuracy. Compliments, on the other hand, must go to those candidates whose drawings had the precision of computer graphics including shading and elevations labelled. Nearly half the candidates were able to score at least one mark by drawing a 3-D shape that either had a correct plan and side elevation or that had the front elevation correctly drawn but went back too far or had a minor error with over 25% of the candidates scoring both available marks.

Intermediate Tier

The majority of candidates realised the nature of the 3-dimensional shape, however there were a variety of levels of success in sketching it. Some candidates correctly sketched the cross-section but their prisms were often of depth 3 cubes, reflecting their misunderstanding of the plan. Attempts at a 3-dimensional sketch of the correct prism usually gained at least one mark.

4. Specification A

Foundation Tier

- (a) 55% of candidates were able to identify a line which went some way to define a plane of symmetry – however only 14% of candidates could fully define a plane by drawing at least two or the lines contained within it.
- (b) This part of the question was successfully answered by 40% of candidates though nets often consisted of two triangles, one rectangle and two trapezia or parallelograms. The 16% of candidates that did this gained partial credit for their answers.
- (c) 33% of candidates drew a triangle with sides of the correct length. However only 16% obtained the mark available for showing construction lines – i.e. arcs drawn using a pair of compasses.

Intermediate Tier

Most candidates gained at least one mark in part (a) but almost half drew only a line of symmetry, usually through the front triangular face or right-hand rectangular face. The triangular cross-section tended to be drawn most often by those scoring full marks. Part (b) was well answered with three quarters of candidates gaining both marks. Most drew at least a rectangle with a triangle at each end but some then added two trapeziums rather than two more rectangles. A few candidates appeared not to know what a net is. In part (c) the majority of candidates gained at least one mark. Many demonstrated a good understanding of construction and drew an accurate triangle with correct arcs. About 20%, though, measured the sides or used a protractor. These attempts were usually sufficiently accurate for one mark to be awarded.

Specification B

In part (a) drawing in one plane of symmetry did not always appear to have been previously experienced by the candidate in spite of this type of question making appearances on past papers. Just over 30% failed to score any marks on this question. The “plane” was often shown as a single line on a face and thus represented a line of symmetry rather than the plane. The ‘net’ for the triangular prism was handled better with over 40% scoring both marks, but there were many variations on the theme not all of which were rewarded. The word ‘net’ seemed to be a mystery to several candidates resulting in the painstakingly drawing fishing nets to cover the shape. The construction of the equilateral triangle produced many credit worthy attempts although the nature of the actual construction was somewhat lacking. To gain the full two marks it required the construction arcs to be shown but only 20% managed this approach.

5. Specification A**Intermediate Tier**

This question provided the majority of candidates with a successful start to the paper. Some candidates appeared to be unsure of the meaning of 'vertices' and the Ps were sometimes placed on the edges or inside the triangles.

Higher Tier

The proportion of correct answers was very high. Most candidates knew the meaning of the term vertex and so were able to pick up the 2 marks.

Specification B**Intermediate Tier**

Very few candidates failed to score here, the great majority gaining full marks.

6. The kite proved to be an easy shape to tessellate for the candidates who knew what they were attempting to do. Many candidates, though, had no idea about tessellations and symmetrical patterns were common. In some responses, the kites were not joined, in others they overlapped.
7. Plan & elevation is now better understood. Most candidates gained full marks in part (a). However, in part (b) most students lost a mark through a failure to highlight the uppermost cube.

8. Foundation Tier

Many candidates gained part marks on this question. Some candidates calculated that there were 5 in a row, 5 high and 6 back but then decided to add together these three numbers rather than to multiply them. Many candidates made good use of the diagram to mark off the section, which gained them credit if they had done so correctly. Other candidates attempted a more 'long winded' approach in multiplying the dimensions of the large carton together and the small boxes together and then attempting to divide. Whilst this approach would have given the correct solution the candidates often failed in obtaining the correct results to their multiplications.

Intermediate Tier

Most candidates attempted this question with few failing to gain at least one of the four marks. Those who attempted to find out how many boxes fitted into each side of the carton, i.e. 5, 5 and 6, tended to be more successful. Sometimes, though, 5, 5 and 6 were added, leading to a common incorrect answer of 16. Some simply worked out 56, giving the number of boxes that fitted into one face of the carton. Those who calculated the volume of the carton and the volume of the box and divided the former by the latter frequently made arithmetical errors. These were commonly made when working out the volume of the carton ($40 \times 40 \times 60$) and in the final division.

9. Foundation Tier

The demand for a side elevation in part (a) of this question attracted a better response than that for a plan in part (b). About half of the answers showed that the candidate understood what was required as a "side elevation" However a significant proportion either drew an elevation which was not from the direction shown or attempted a 3D drawing. The term "plan" was understood by very few candidates. Many produced a side elevation, a choice of views or an attempt at drawing a net.

Intermediate Tier

Part (a) was usually done well, with a few common errors such as drawing a side elevation or attempts to draw it as 3-D. IN contrast part (b) was not done well at all. Few understood what a plan was, and a lot tried to draw what looked like the net, or a side elevation.

10. Most candidates were able to calculate the area of at least one face, usually the L-shape, and virtually all give the units with their answer. Those candidates adopting a systematically approach were generally more successful than those who didn't.

The most popular approach was to split the L-shape into 2 rectangles and then calculate each of the other faces separately, but a small number of candidates worked out the perimeter of the L-shape and multiplied by the length to calculate the area of six faces together. Some candidates calculated the surface area by first drawing a net for the shape. The most common error was to miss out one or more of the "hidden" faces.

Other common errors were:

- to calculate the area of the L- shape as $3 \times 1 + 5 \times 1$ or $3 \times 1 + 5 \times 4$
- to split the shape into two cuboids and calculate the total surface area of each, thus producing an excess of surface area.
- to calculated the volume of the shape

Most candidates were able to score a mark for the units.

11. Foundation Tier

Candidates find visualising two-dimensional views from a 3-D representation very difficult and this question proved the point. Candidates were more successful in drawing the front elevation in part (a) than in part (b) but the question was not well answered. The correct plan was rarely seen in part (b).

Intermediate Tier

Part (a) was well answered with almost 80% of candidates drawing a correct front elevation. Errors were sometimes made with the size of the trapezium and some candidates drew a 3D image from a correctly drawn trapezium face. Part (b), however, was answered poorly, with fewer than 20% of candidates able to draw a correct plan. A slightly higher proportion gained one mark for drawing a rectangle of width 2cm. It was apparent that many candidates did not understand the term 'plan' and nets were frequently drawn.

12. Foundation

There were some very good attempts to draw a sketch o the 3D shape, with more than half the candidates gaining full marks. A minority attempted to draw nets or 2D diagrammatic representations of the shape. In some cases the sketch showed a shape where the sloping edges failed to meet at a single point, which in most cases was given 1 mark.

Higher

This question was answered very well. The majority of candidates gave a sort of isometric view of a square based tetrahedron surmounting a cuboid and gained their marks. A few candidates seemed to misunderstand the task and gave a repeat of the front or the side view. Some candidates took the cross sign on the plan literally (figuratively?) and drew a diagonalcross on the base of the cuboid part.

13. About three quarters of the candidates were able to gain at least one mark on this question. In part (a), a common incorrect answer for the point with coordinates $(2, 1, 0)$ was R , and in part (b), a common incorrect answer for the coordinates of P was $(2, 3, 1)$.

14. Foundation

Over 60% of candidates were awarded both marks for a correct drawing. However, a significant proportion of candidates attempted to give a 3 dimensional representation and could not be given any credit for their answers.

Higher

Whilst the modal answer to this question was one of the correct ones, there were many alternative answers seen. Many offered 3-dimensional sketches which all gained no marks.

15. The key to gaining full marks in this question was to realise that the height of the four triangular faces was not 3 cm. Nevertheless those who drew 4 isosceles triangles, generally with the two equal sides being 3 cm each, were considered creditable and worthy of 2 marks. The positioning of the apex of the triangles centrally was not always well done and some candidates lost a mark for accuracy. Others used compasses to draw accurate triangles. Over a third of the candidates clearly did not understand the term 'net' as they proceeded to either draw some sort of 3-D diagram or drew the plan of the pyramid.

16. Specification A

Foundation

The understanding of this topic is mixed. Clearly many candidates are confused with the terminology of side/front elevation and plan in part (a), very many simply copying one of the two elevations shown.

In part (b), attempts at a 3-D sketch were generally good and many candidates scored at least one mark in this part.

Higher

The correct answer of a 2 by 2 square was drawn by about half of the candidates. A very common error was to draw a rectangle with either the correct width or the correct height. Some candidates reproduced the given plan whilst others reproduced the given front elevation.

Part (b) was answered quite successfully. Most candidates seemed to have a good understanding of what was required and appreciated that the shape should look like a prism. Some of the sketches were not too well drawn but the majority at least showed a trapezoidal face.

Specification B**Foundation**

Many candidates were able to score at least 1 mark for this question.

In part (a), few candidates drew a 2×2 square for the side elevation of the solid shape, but many were able to score a mark for a drawing an acceptable rectangle. In part (b), Many candidates were able to score at least 1 mark for an acceptable sketch of the solid shape.

Some had difficulty in maintaining the same perspective throughout the whole sketch. Common incorrect answers here include sketches of triangular prisms, cubes, cuboids and nets.

Higher

There were many good answers to part (a) although some candidates thought the required elevation looked like the plan or like the front elevation.

Answers to part (b) were generally successful.

17. Part (a) of this question was answered well by those candidates who realised that the instruction to sketch the front elevation required a 2 dimensional representation and not merely another sketch of the solid object. About a third of candidates scored 2 marks here. Few candidates understood the term “plan” in part (b). Some again gave 3 dimensional representations. Many candidates tried to draw a net for the solid whilst others “hedged their bets” by producing views from all sides together with the plan of the object.
18. No Report available for this question.
19. Although a pleasing number of candidates were able to correctly label both of the required points, very many failed to even locate one point. If just one point was labelled correctly it would be more likely to be the point B.
20. No Report available for this question.

21. No Report available for this question.