Blouberg Ridge Primary School
Grade 7
Mathematics
Paper 2
Mid-Year Examination Paper 2019

Question 1: Underline the correct answer. **[5]**

1.1 A double compact disk (CD) box has a height of 2cm, length of 14cm and a breadth of 12 cm. Calculate the volume of the CD box.

a) 336 cm b) 28 cm^3 c) 336cm^2 d) 336cm^3

1.2 The area of a rectangle is 45cm^2. If the length is 9cm, calculate the breadth.

a) 5cm b) 10cm c) 3cm d) 15cm

1.3 The perimeter of a square is 24cm. The length of a side is:

a) 6cm b) 4cm c)12cm d) 8cm

1.4 The formula to calculate area of a triangle is

a) A=LX B b) A= S x S c) A= $\frac{1}{2}$ (b x h) d)d) A= L x B x H

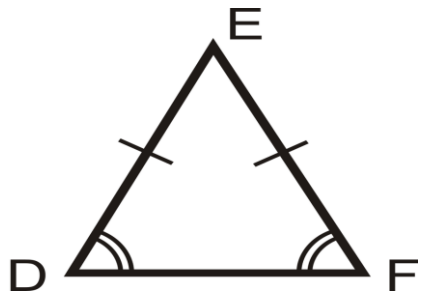
1.5 The triangle on the right is called

a) scalene

b) equilateral

c) right-angled triangle

d) isosceles



Question 2: Fill in the blanks. **[5]**

2.1 The sum of the angles in a quadrilateral equals _____. (1)

2.2 The polygon with nine sides is called a _____. (1)

2.3 A triangle with all sides equal is called _____. (1)

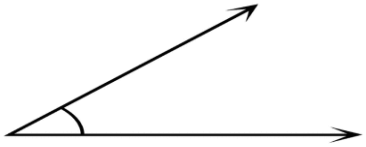
2.4 The _____ is the outline or border around the outside of a circle. (1)

2.5 A straight angle measures _____ degrees. (1)

Question 3: Angles **[12]**

3.1 Measure the following angles. (2)

3.1.1



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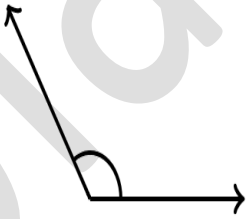
3.1.2



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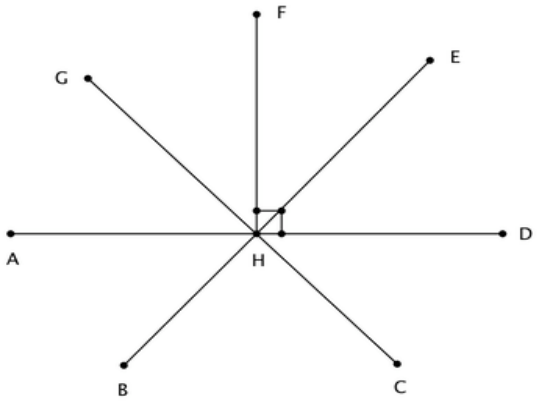
3.2 Look at the diagram on the right and name the type of angles. (3)

3.2.1 GHD - _____

3.2.2 FHE - _____

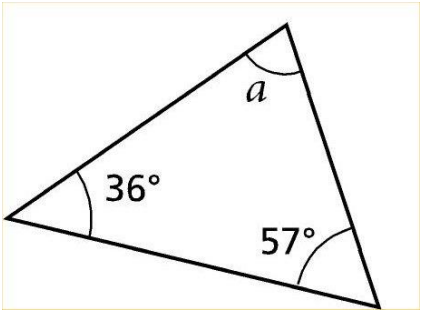
3.2.3 AHD - _____



3.3 Construct and label angle PQR measuring 50°. (2)

3.4 Use your knowledge of triangles and angles to find the size of the missing angle. Show your working.

(2)



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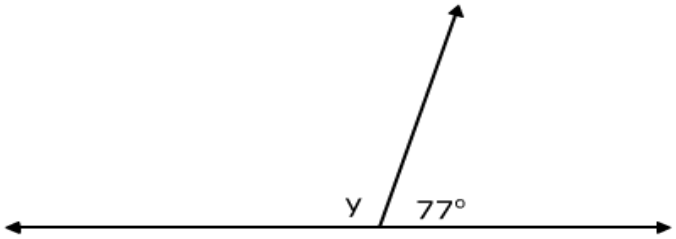
(2)



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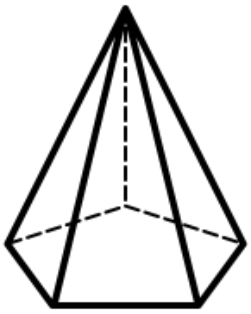
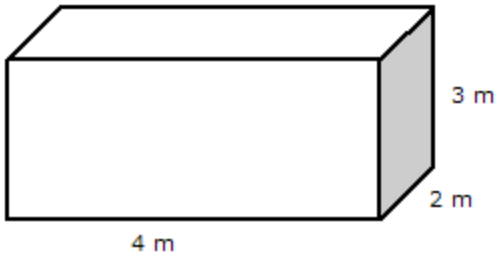
Question 4: Circles **[5]**

4.1 Draw concentric circles, one with a diameter of 100 mm, the other with a radius of 3cm. (2)

4.2 Mark the centre point A. (1)

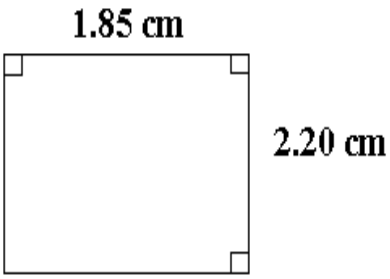
4.3 Draw a chord in the larger circle so that it does not touch the circumference of the smaller circle. Label the chord DE. (2)

Question 5: Look at the 3D shapes below and complete the table. **[6]**

3D Shape	Faces	Edges	Vertices
			
			

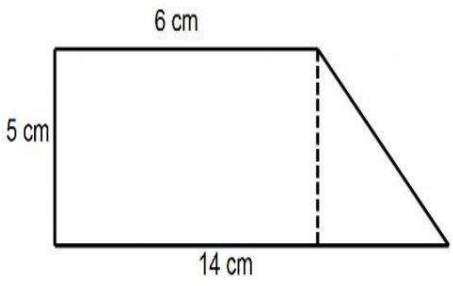
Question 6: Calculate the area of the shapes below: **[9]**

6.1



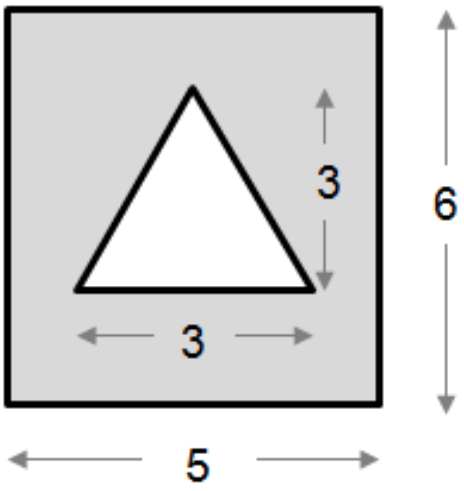
Show all your working.

6.2



Show all your working.

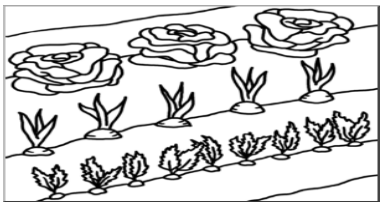
6.3 Calculate the area of the shaded region. The measurements given are in centimetres (cm).



Show all your working.

Question 7: Problem Solving **[8]**

7.1 Mr J. Daniel has a rectangular garden which is 14m long and 7m wide. He builds a fence around it but leaves an opening 2,5 m for a gate.



a) How long is the fence? (2)

b) What will the fence cost if it is R47 per metre? (2)

c) If he gets the fence from a cheaper supplier at R39,00 per metre, how much will he save in total? (2)

7.2. A sweet factory produces a new range of sweets that will fit in the box as shown below.

The surface of the box will be wrapped in a label giving details of the product.

Find the surface area of the box. (2)