Western Cape Government
Education

WCED
Mathematics
Paper 2
JUNE 2013

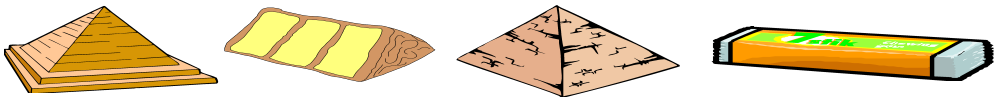
Name: _____
Grade 7: _____
Date: _____
Total: 45 marks Time: 60 minutes

A

**LEARNING OUTCOME 3**

1. **Circle the letter of the correct answer.**

1.1 Which of the following objects has the shape of a prism? (1)



**A** **B** **C** **D**

A A and B
B B and D
C B and C
D C and D

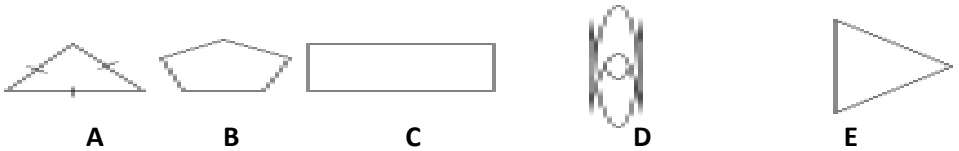
1.2 Which of the following coloured pictures have shapes that look like trapeziums? (1)



**A** **B** **C** **D**

A A
B B
C C
D D

1.3 Which of these only has one line of symmetry? (1)



**A** **B** **C** **D** **E**

A A and E
B B and D
C C and E
D E and C

1.4 Which one of the letters shown below has both parallel and perpendicular lines? (1)

A M

B T

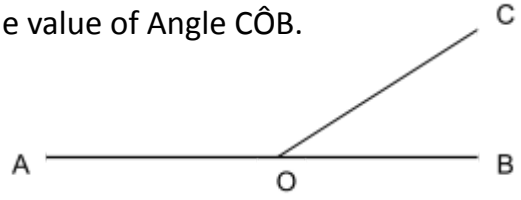
C Z

D E

1.5 How many lines of symmetry can be drawn in a hexagon? (1)

A 6
B 4
C 3
D 2

1.6 a) The figure below is not drawn to scale. AÔB is a straight line. If Angle AÔC is 135°, find the value of Angle CÔB. (1)




A 55°
B 45 °
C 155 °
D 35 °

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2 **Mark true or False in the block**:

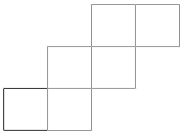
2.1 Two 10c coins are congruent. (1)

| | |
|---|---|
| True | |
| False | |

2.2 All rectangles are similar (1)

| | |
|---|---|
| True | |
| False | |

The figure below is a net of a cube.

2.3  (1)

| | |
|---|---|
| True | |
| False | |

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3. **Give one word for the following shapes.**

3.1 Opposite sides are parallel and equal in length. Opposite angles are equal in size but not $90^0$. (1)

_____

3.2 All 2-dimensional closed shapes with four straight sides. (1)

_____

3.3 All sides are equal in length. Opposite sides are parallel. Opposite angles are equal but not $90^0$. (1)

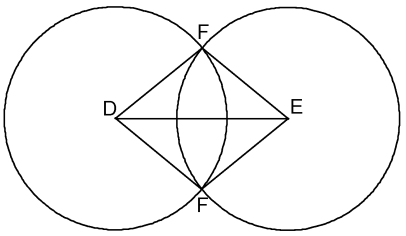
_____

4. **Complete the following table regarding the following 3D object.** (4)

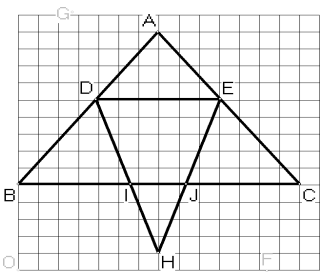
| | | | |
|---|---|---|---|
| | | | |
| Name of object | Number of faces | Number of edges | Number of vertices |
| | | | |

5. **Answer the following.**

5.1 The following construction below illustrates how to construct an _____ triangle DEF. (1)



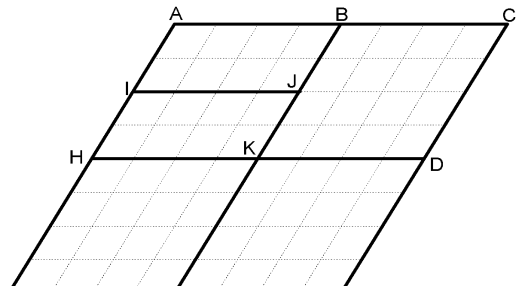

5.2 Name the shapes described by the figures indicated below.




a) AEHD _____ (2)

b) BDEC _____

6 **The next figure is drawn on a grid of parallel and evenly spaced lines.**



6.1 Write down one parallelogram that is similar to parallelogram ABJI. (1)

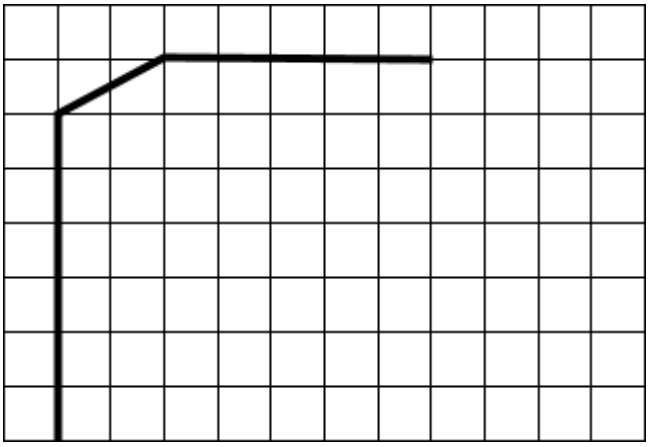
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6.2 Write down one rhombus that is congruent to rhombus ACDH. (1)

_____

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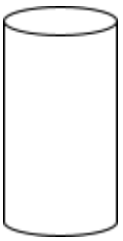
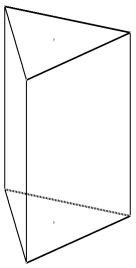
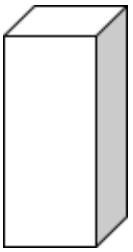
7 In the following drawing the four vertices of the rectangular prism have already been drawn. Complete the rest of the drawing of prism with vertices PTWV. (1)



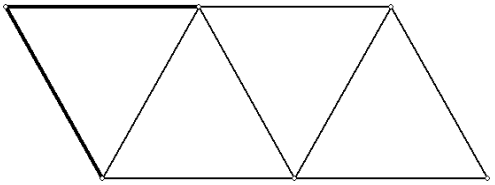
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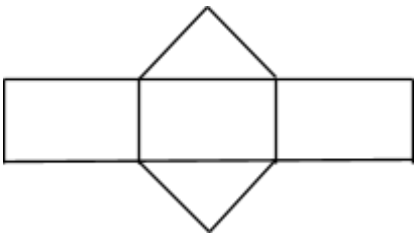
8 **Identify the following from the 2D shapes and 3D objects given.** (4)

26

| | | | |
|---|---|---|---|
| |  |  |  |
| | | | |

9 Identify the object of the following nets. (2)





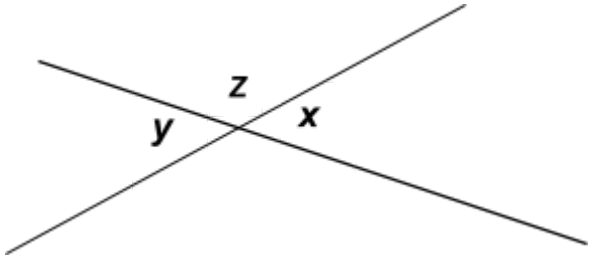
_____ _____

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10 The figure below is not drawn to scale. The 2 lines are straight lines. If Angle ***x*** is 36°, find the value of Angle ***y*** and ***z***. (2)

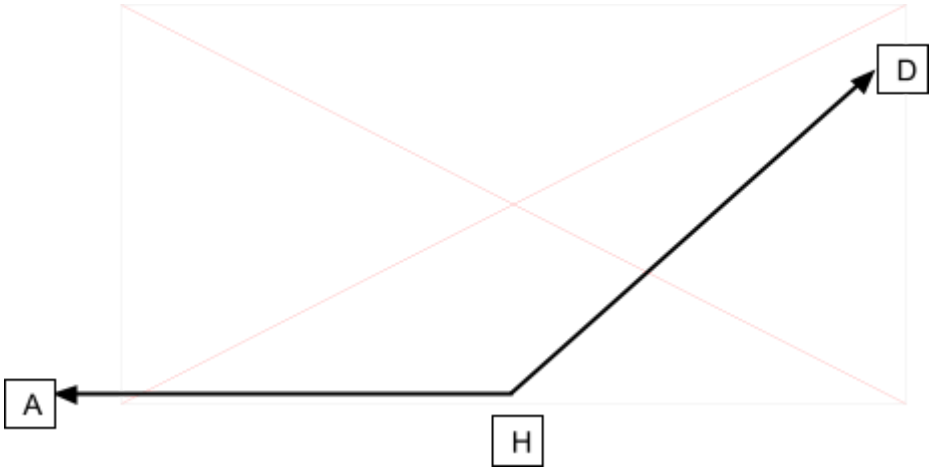
Y = _____

Z = _____



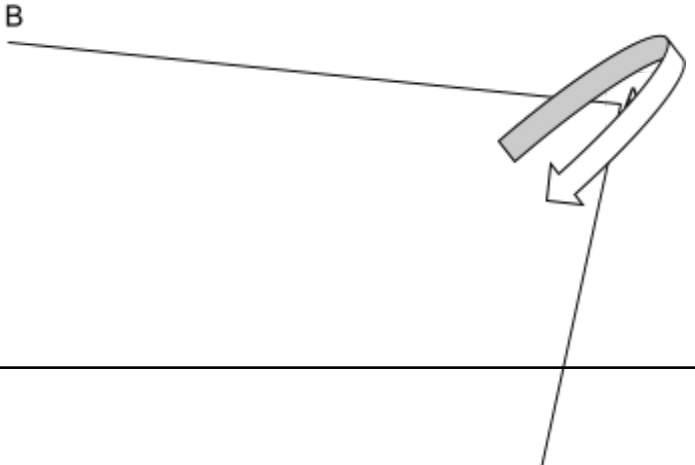

**LEARNING OUTCOME 4**

11 **Measure angle AĤD accurate by using the protractor as indicated.** (1)




**AĤD = _____**

12 **Use a protractor and measure BÂC accurate to one degree.** (2)




**BÂC = _____**

13 **Use a protractor and a ruler to accurately construct an angle of $35^0$.** (2)

**LEARNING OUTCOME 4**

14 Use the following set of numbers to answer the questions:

**-7 ; 3 ; 4 ; -2 ; 9 ; 5 ; 7 ; 4 ; -5**

14.1 What is the mean of the given set of numbers? _____ (1)

14.2 What is the mode of the given set of numbers? _____ (1)

14.3 What is the median of the given set of numbers?_____ (1)

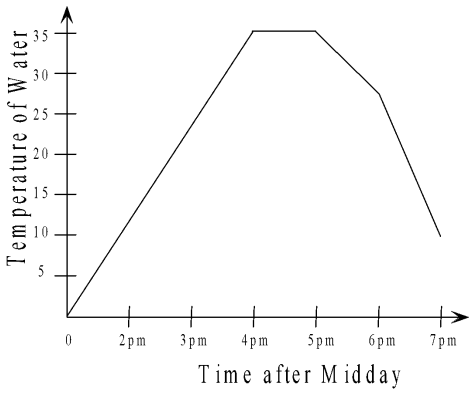
14.4 What is the range of the given set of numbers?_____ (1)

15 The marks for a maths test out of 100 were as follows: (3)

**97, 99, 81, 78, 73, 95, 97, 85, 83, 85, 88, 79, 81, 93, 86, 83, 71.**

Draw a stem-and-leaf plot to organise the data.

16 The graph below represents the temperature of the water in a spa bath as measured from midday, when the bath was switched on, up to 7pm.




16.1 For what period was the temperature constant? _____ (1)

16.2 For what period was the temperature Increasing? _____ (1)

16.3 At what time was the bath switched off? _____ (1)

**TOTAL : 45 MARKS**