LIMPOPO
PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF
EDUCATION

VHEMBE EAST DISTRICT

SENIOR PHASE

GRADE 8

MATHEMATICS PAPER 2

TERM 4 EXAMINATION

2024 NOVEMBER

Marks: 60

Duration: $1\frac{1}{2}$ Hours

Instructions to the Learner

1. Read the questions before answering
2. Answer all questions on a separate answer book provided
3. Question 1 consists of 5 multiple choice questions. Write down the letter of the correct answer.
4. All working must be shown
5. The examination is out of 60
6. The test duration is $1\frac{1}{2}$ hours
7. Approved scientific calculators (non-programmable and non-graphical) may be Used
8. The diagrams are not drawn to scale

This question paper is consists of 5 pages including the cover page

QUESTION 1 MULTIPLE CHOICE [10 MARKS]

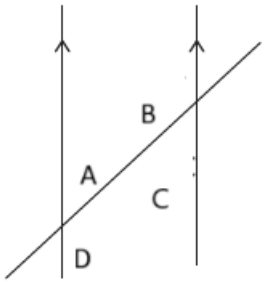
Four possible answers are given. Write down the letter of the correct answer.

E.g. 1.6 D

1.1 Two lines are perpendicular to each other if they meet at (2)

A. 360° B. 180° C. 90° D. 60°

1.2 Which pair of angles in the figure below forms co-interior angles (2)



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

1.3 Which one of the statements below represents an equilateral triangle (2)

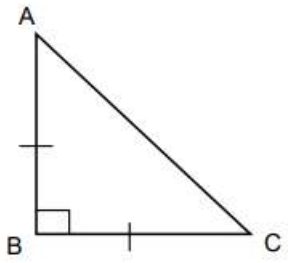
A. Has two equal sides

B. Each interior angle is equal to 60°

C. Ha s a right angle 90°

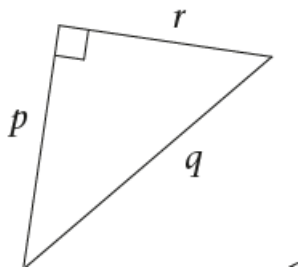
D. Has no sides equal

1.4 In a right-angled triangle ABC below, AB = BC. The size of $\angle C$ is



A. 15° B. 30° C. 45° D. 60°

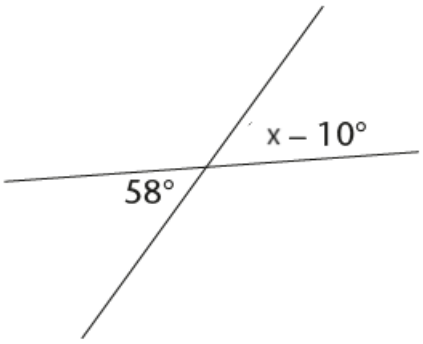
1.5 Which statement regarding the given triangle is correct? (2)



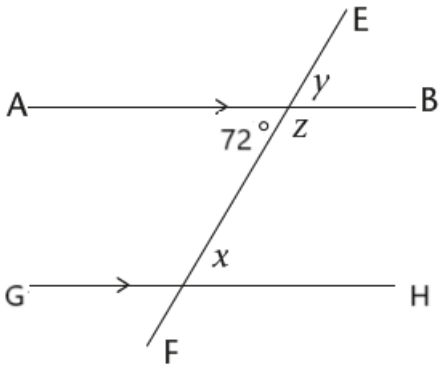
A. $r^2 = q^2 - p^2$
B. $r^2 = p^2 - q^2$
C. $r^2 = q^2 + p^2$
D. r = q – p

QUESTION 2 **[10 MARKS]**

2.1 Calculate the value of x. Give reasons for your answer (4)



2.2 Determine with reasons the sizes of x, y and z (6)



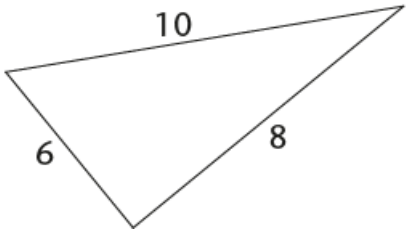
QUESTION 3 **[12 MARKS]**

3.1 Complete the sentence; If a triangle is right-angled, then the square of the length of the hypotenuse is _____. (1)

3.2 A right angled triangle has a hypotenuse z and two other sides x = 12 cm and

y = 5cm. Calculate with reasons the length of the hypotenuse. (5)

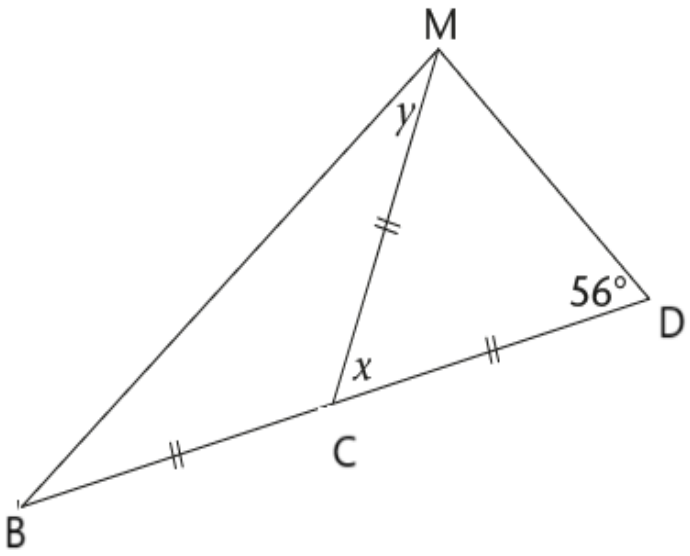
3.3 Determine whether the triangle below is right-angled or not. (6)



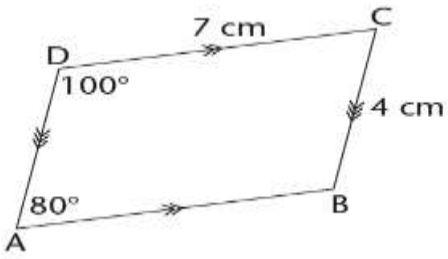
QUESTION 4 **[14 MARKS]**

4.1 _____ is a quadrilateral with one pair of opposite sides parallel. (2)

4.2 BCD is a straight line. Calculate the sizes of x and y with reasons (6)



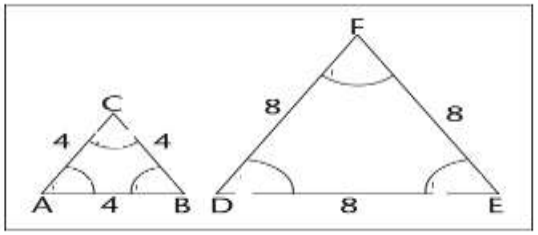
4.3 Consider the figure below;



4.3.1 Find the lengths of DA and AB (2)

4.3.2 Find the sizes of angles B and C (2)

4.4 Are the triangles below similar? Give a reason for your answer (2)



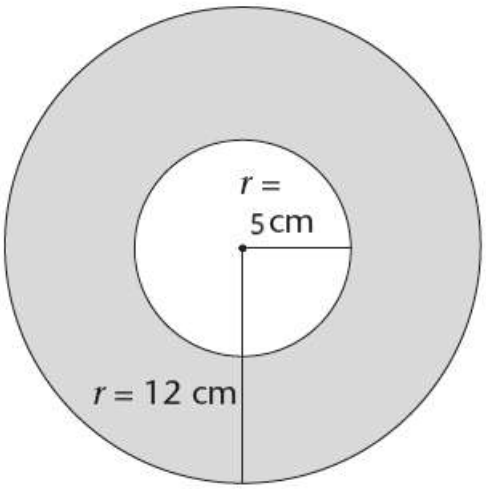
QUESTION 5 **[14 MARKS]**

5.1 $5cm^2$ = _____ mm^2 (2)

5.2 The perimeter of a square is 40 cm. What is the length of one side of a square? (2)

5.3 Mr. Jones has a rectangular garden as shown below. He intends to put a fence around his garden. If the price of a fence is R39,75 per meter, how much will it cost to put a fence around the garden? (6)

5.4 Calculate the area of the shaded part ($\pi = \frac{22}{7}$= 3,14) (4)



TOTAL MARKS: 60