



higher education
& training

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA



SUBJECT: FOUNDATIONAL MATHS

LEVEL: PLP

MODULE/CHAPTER NO: MODULE 3

**UNIT 2: THE PERIMETERS AND AREAS
OF TWO-DIMENSIONAL FIGURES**

UNIT 2: THE PERIMETERS AND AREAS OF TWO-DIMENSIONAL FIGURES

After completing this topic, you will be able to:

1. Know what a perimeter is
2. Calculate the perimeter of a
 - a. Rectangle
 - b. Square
 - c. Triangle
 - d. Circle (circumference)
 - e. Trapezium
 - f. Parallelogram

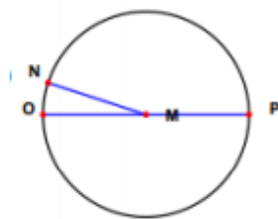
UNIT 2: THE PERIMETERS AND AREAS OF TWO-DIMENSIONAL FIGURES

EXERCISE 2.2



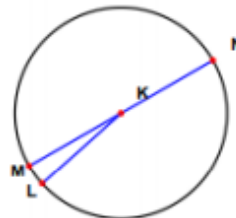
Use the π – key on your calculator
File all your work behind this page.

1.



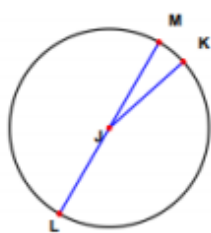
Radius:
Diameter: 10 cm
Circumference:

2.



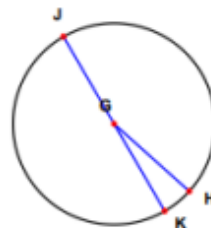
Radius:
Diameter 8 mm
Circumference:

3.



Radius: 8 cm
Diameter:
Circumference:

4.



Radius 12 mm
Diameter:
Circumference:


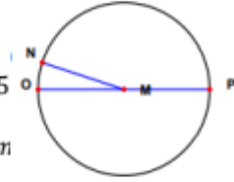

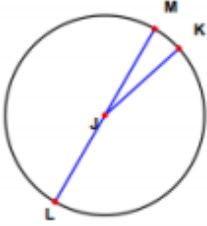
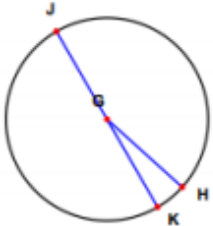
5. A square has a side length of 10 cm.
Calculate the perimeter.

6. A square has side length of 64 mm. Calculate
the perimeter.

7. A rectangle is 5 m wide and 3 m high.
Calculate the perimeter.

8. A rectangle is 10 m wide and 6 m high.
Calculate the perimeter.

SOLUTIONS

| | | |
|---|---|--|
|  | <p>Use the π – key on your calculator File all your work behind this page.</p> | |
| <p>1. Radius: 5 cm</p> <p>Circumference = $2\pi r$</p> $= 2 \times \pi \times 5$ $= 31,419 \text{ cm}$  | <p>2. Radius: 4 mm</p> <p>Circumference = $2\pi r$</p> $= 2 \times \pi \times 4$ $= 25,133 \text{ mm}$  | |
| <p>3. Diameter: = 16 cm</p> <p>Circumference = $2\pi r$</p> $= 2 \times \pi \times 8$ $= 50,265 \text{ cm}$  | <p>4. Diameter = 24 mm</p> <p>Circumference = $2\pi r$</p> $= 2 \times \pi \times 12$ $= 75,4 \text{ mm}$  | |
| <p>5.</p> <p>A square has a side length of 10cm.</p> <p>perimeter = 4×10</p> $= 40 \text{ cm}$ | <p>6.</p> <p>A square has side length of 64mm.</p> <p>Perimeter = 4×64</p> $= 256 \text{ mm}$ | |
| <p>7.</p> <p>A rectangle is 5m wide and 3m high.</p> <p>Perimeter = $2(5 + 3)$</p> $= 16 \text{ m}$ | <p>8.</p> <p>A rectangle is 10m wide and 6m high.</p> <p>Perimeter = $2(10 + 6)$</p> $= 32 \text{ m}$ | |