Unit Review
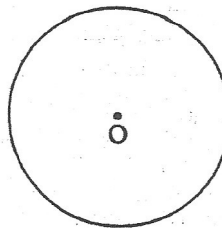
4.1   **1.** This circle has its centre at point O.

a) Draw a radius of the circle.
What is the length of the radius? _____

b) Draw a diameter of the circle.
What is the length of the diameter? _____

c) Write a relationship between the radius, r, and the diameter, d, of a circle.

_____

4.2   **2.** Billy plans to put some plastic edging around his circular fish pond.
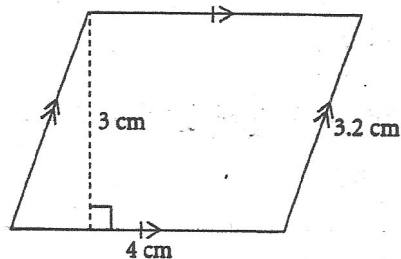The diameter of the pond is 5 m.
Find the amount of plastic edging that Billy will need.

_____

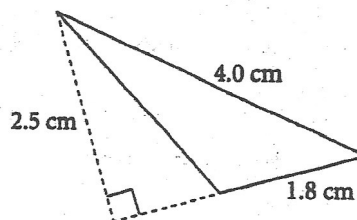**4.3**   **3.** Find the area of each shape.
4.4

a)

3 cm   3.2 cm

4 cm

Base = _____
Height = _____
Area = base × height
Area = _____ × _____ = _____
The area is _____.

b)

4.0 cm

2.5 cm

1.8 cm

The area is _____.

4.5   **4.** Estimate the area of each circle, then calculate the area to the nearest square unit.

a) radius of 4 mm

Estimate: _____

Area: _____

b) diameter of 10.1 m

Estimate: _____

Area: _____

> **Tip**
> Use $\pi = 3$
> in your
> estimates.

4.6
4.7

5. Kelly and her friends plan to start a rock band.
They will play in their town and in the surrounding area.
The band has made this table to show its expenses
as percents of what it will earn.

Expenses of Kelly and the Rockers

Type of Expense	Percent of budget	Each percent as an angle
Advertising	10%	
Clothes	20%	
Equipment	25%	
Food	15%	
Travel	30%	

a) Complete the table.

b) Draw and label a circle graph.

c) The band estimates it will earn $10 000 from its gigs.
How much money will the band spend on food? _____

d) Which type of expense is one-half the amount spent on clothes? _____
How can you tell this:

i) from the table? _____

ii) from the graph? _____

_____

e) The band wants to spend $5000 on equipment upgrades.
How much will the band have to earn to be able to do this? _____

f) Write a question you can answer from the graph.

_____

_____

g) Answer your question.

_____