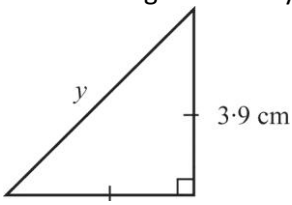
HOMEWORK 9 Term 4 Sheet 3 Name:_____ /27

If a question has more than 1 mark, show some working out for full marks. Due:_____

1. **Pythagoras' Theorem (2)**
Find the length of the hypotenuse.



2. Fractions (3)
a) Add and simplify

$$\frac{2}{5}+\frac{6}{7}$$

b) Change to an improper fraction

$$2\frac{1}{3}$$

3. Statistics – (3)
State whether the following data is categorical, ordinal, or numerical.

a) The month of birth

b) The number of loaves of bread sold in a day at a particular supermarket

c) The income of a group of employees.

4. Trigonometry (3)
A building 20m high casts a shadow that is 7.5 m long. Calculate the angle of elevation of the sun.

5. Solving Equations (3)
Solve for *x* in each of the following

a) $\frac{x}{6}=3$

b) $5x=4x-17$

6. Geometry- (2)

Draw the net of a cylinder.

7. Indices (2)

Simplify $\frac{16c^5}{8c^3}$

8. Financial Arithmetic (2)

Find the simple interest if $7000 is invested at 4% p.a. for 3 years.

9. Expand the bracket (2)

$3(2p+q)$

10. Measurement - Surface Area (5)
Find the surface area of the shape below. Hint: there are 5 sides.