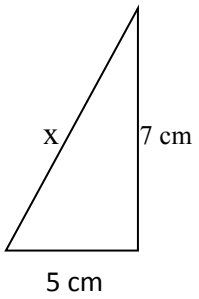
HOMEWORK 9 Term 4 Sheet 4 Name:_____ /27

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.



$x^2 =$ ___ + 5^2

$x^2 =$ ___ +___

$x^2 =$

$x = \sqrt{\_\_\_\_\_}$

$x =$

2. Fractions (3)

a) Subtract and simplify

$$\frac{3}{8} - \frac{4}{7}$$

b) Simplify

$$\frac{12}{8}$$

3. Statistics – (2)

Representing the following in a stem and leaf plot

23 34 56 22 34 27 45 28 51

4. Trigonometry (3)

A ship sails on a bearing of 25°N for 12 km. How far east has it sailed?

5. Expanding (4)

Expand these brackets

a) $4(x + 4)$

b) $3x(x - 3)$

6. Geometry- (2)

Draw the net of a triangular prism

7. Indices (2)

Simplify $3x^4 \times -5x^3$

8. Financial Arithmetic (3)

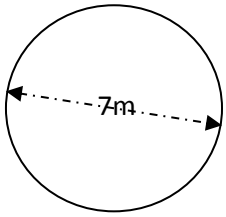
a) 10% of 240

b) 20 % of 240

c) 5 % of 240

9. Measurement (2)

Find the area of this circle $A = \pi r^2$



10. Linear Equations (4)

Use the rule $\mathbf{y = 2x + 1}$ **to fill in the table**

-2	-1	0	1	2	3

What is the gradient of this linear equation?