Decimals (18 marks)

1. Write 78.345 correct to one decimal place.

2. Is the decimal $0.666666\ldots$ **terminating** or **recurring**? Circle the correct word.

3. Evaluate:
   a. $4.33 + 1.68$

   b. $8 \times 0.25 =$ _____

   c. $(0.5)^2 =$ _____

   d. 4.25×0.6

4. Evaluate:
   a. $0.75 \div 3 =$ _____

   b. $0.45 \div 0.9 =$ _____

5. Convert $\frac{4}{5}$ to a decimal.

6. Write the following in descending order; (2 marks)
   0.345, 4.12, 0.023, 1.24

7. Celia bought a pen for $1.70, an exercise book for $2.50, and a pack of coloured pencils for $4.95. (2 marks)
   a. Calculate the total cost of her purchase

   b. What was her change from a $10 note?

8. Petrol costs 139.9 cents per litre. If I put 40 L in my car's petrol tank, how much would I be charged in dollars and cents? (2 marks)

9. Ruth purchased wood to make a planter box for her garden. She purchased 4 pieces of wood that were each 1.2m long and 2 pieces of wood 0.8m long. If the cost of wood was $8 per metre, what was the total cost of the wood for the planter box? (3 marks)

Length and Area (26 marks)

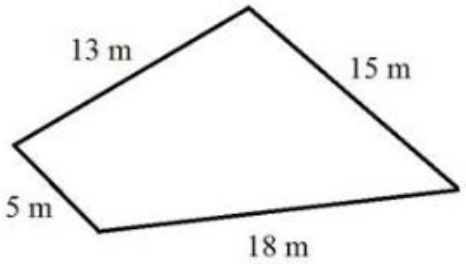
1. Match the abbreviation to its unit.

ha	kilometre
km	centimetre
cm	square metre
m^2	hectare

2. Convert the following;
   a. 5 km = _____ m
   b. 1250 mm = _____ m
   c. 12.5 ha = _____ m^2

3. What unit would you use to measure the following?
   a. Distance between Carlingford and Parramatta.
   _____
   b. Area of a tiled floor in a kitchen.
   _____
   c. The length of your pencil
   _____

4. Find the perimeter;
   a.



_____

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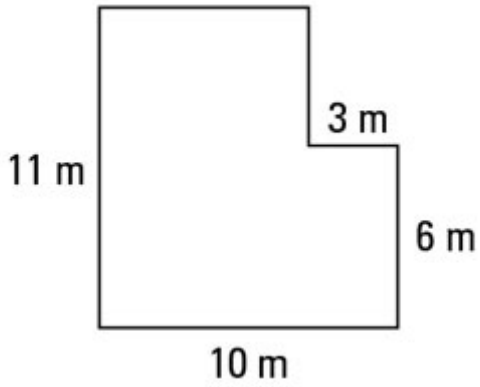
b. (2 marks)



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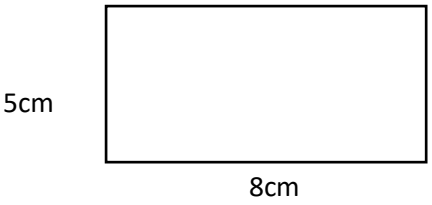
7. Find the area of the following shapes.
   a. A rectangle with a length of 8cm and a width of 5cm.



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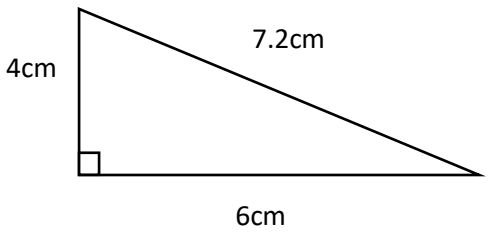
b. (2 marks)



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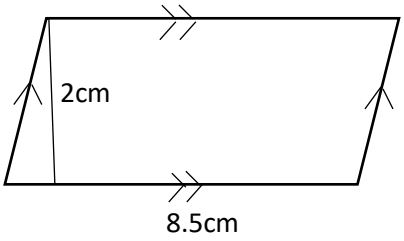
_____

8. Find the Area of the following shapes.

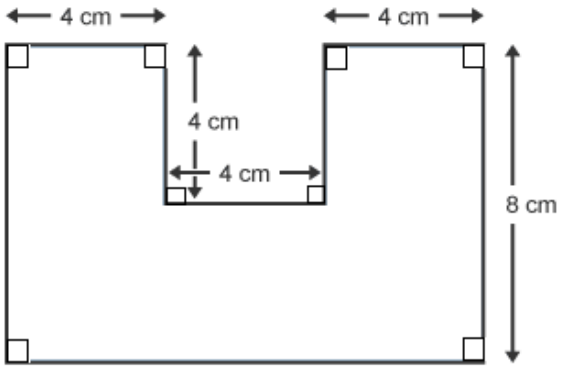
a.



_____

_____

b. (2 marks)



_____

_____

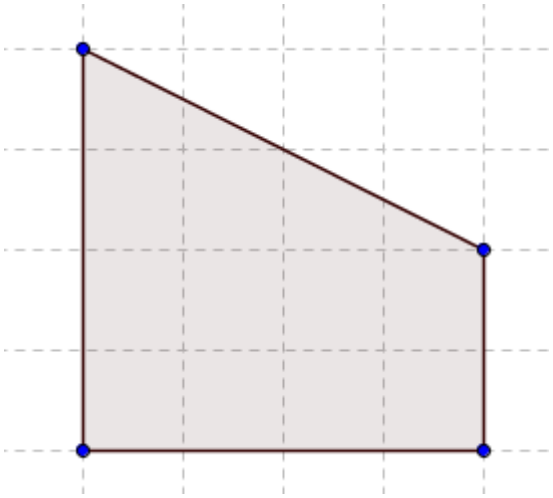
_____

_____

9. Use the words below to fill in the gaps. (4 marks)
{Area, Units, Length, Perimeter}

The distance around a shape is called the _____, whilst the space inside a shape is called the _____. When making _____ and area calculations, the _____ must be the same.

10. Susan needs to put new tiles on her kitchen floor.
(3 marks)



a. What is the minimum number of tiles she needs to cover this area? Note: Tiles can be cut to fit.

_____

_____

b. If the tiles come in packs of 5, what is the minimum number of packs she will need to purchase?

_____

c. If packs cost $17.50 each, how much will it cost to buy the tiles?

_____

_____

Algebra (27 marks)

1. Fill in the blanks;
   {Commutative, Distributive, Substitute, Coefficient, Pronumeral}
   a. _____:- letters that represent numbers.
   b. _____:- A law of arithmetic that says that numbers can be added or multiplied in any order.
   c. _____:- the number at the front of a pro-numeral.
   d. _____:- To replace a variable with a number.

2. Choose a pair of like terms.
   $2xy, -x, 4yx, 2x^2$

   _____

3. Simplify the following;
   a. $2x + 5\,x =$ _____
   b. $6x \times 4y =$ _____
   c. $2ab + a^2 - 4ab + 2a^2 =$
   (2 marks)

   _____
   _____

4. Write an expression for each of the following;
   a. The sum of x and y.
   b. The product of 5 and x.
   c. 5 divided by x.
   d. The cost of n pens at $1.25 each.
   e. The product of 5 and p, subtracted from 12.

5. If $x = 5, y = 2\ and\ z = -3$.
   Find the value of;
   a. $x - 5 =$
   b. $2y - 5 =$
   c. $2z \div y =$
   d. $3(x - z) =$
   (2 marks)

6. Expand and simplify;
   a. $2(x - 4) =$
   b. $-3(x + 2) =$

7. Expand and simplify; (6 marks)
   a. $4(x - 2) - 2x =$
   b. $2x - (x + 3) =$
   c. $4(3 - 2x) - 8 =$

Carlingford High School

Mathematics

Year 7 Term 3 Test

2018

Name: _____

Circle your class below.

Class: 7C 7A 7R 7L 7I 7N 7G

Time allowed: ***50 minutes***

- NO Calculators allowed.
- Complete the examination in blue or black **pen**.
- Show all necessary working.
- Attempt all questions.
- Extension questions are marked with an asterisk.

	Decimals	**Length and Area**	**Algebra**	**Total**	
Total	**/18**	**/27**	**/26**	**/71**	**%**