

Name			
Class	A	Term	2
Year	8	Quiz Number:	3

1) Draw a ring around the part of a circle that is **not** a straight line. [1]

diameter chord radius circumference tangent

2) Work out.

-6×-13 [1]

.....

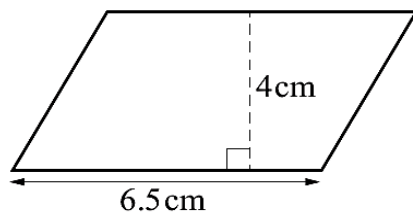
3) Complete each of these calculations with the correct whole number. [3]

$13^0 =$

$(2^3)^2 =$

$11^{15} \div 11^{13} =$

4) The diagram shows a parallelogram. [1]

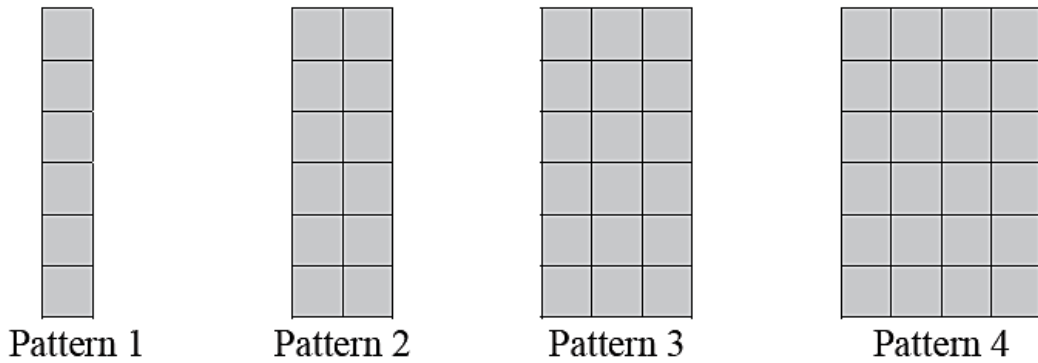


NOT TO
SCALE

Work out the area of the parallelogram.

..... cm^2

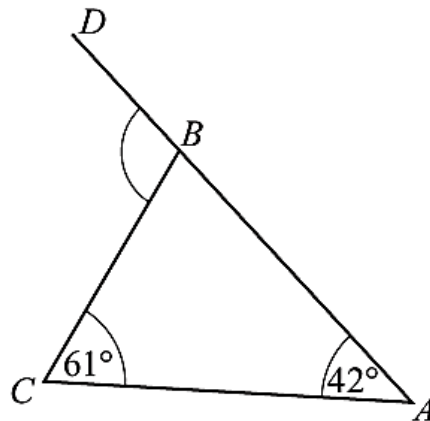
5) The diagram shows the first four patterns in a sequence made with square tiles.



Draw a ring around the exact number of tiles that could make a pattern in this sequence.

- 32 tiles
64 tiles
96 tiles
602 tiles
[1]

6) The diagram shows a triangle ABC .



NOT TO
SCALE

ABD is a straight line.

Find angle CBD .

.....^o [1]

7) Work out.

$$\sqrt{3^2 \times 2^3 + 28}$$

[2]

8)a) The n th term of a sequence is $\frac{n}{2} + 5$

Work out the 6th term of the sequence.

[1]

.....

b) Here are the first five terms of a different sequence.

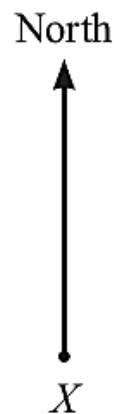
2, 8, 14, 20, 26

Find the n th term of this sequence.

[2]

.....

9) Draw a bearing of 285° from point X .



[1]

10) Find the value of each expression when $x = -2$ and $y = 5$

$$4(y - x) = \text{.....}$$

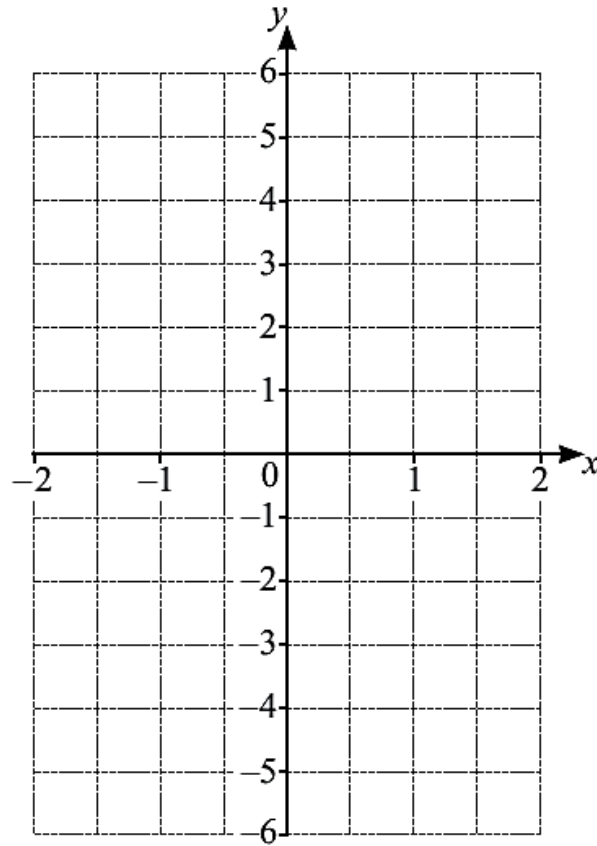
$$10y - 3x^2 = \text{.....}$$

[2]

11) Complete the table for $y = 2x - 1$

x	-2		2
y		-3	

Draw the graph of $y = 2x - 1$ on the grid.



[3]

12) Here is an inequality.

$$x \leq 7$$

Write down the greatest possible value of x .

$x =$ [1]

13) Expand the brackets.

$$5x(x + 4)$$

..... [1]

14) Rajiv sells three different sizes of cups of coffee in the ratio

$$\text{large} : \text{medium} : \text{small} = 3 : 9 : 2$$

He sells 238 cups of coffee in total.

Work out how many **small** cups of coffee Rajiv sells.

..... [2]

15) Here is an inequality.

$$x \leq 7$$

Write down the greatest possible value of x .

$x =$ [1]

16) Here is a function machine.

$$\text{Input } (x) \rightarrow \boxed{\times 3} \rightarrow \boxed{-5} \rightarrow \text{Output } (y)$$

Complete the table showing inputs and outputs for the function machine.

Input (x)	Output (y)
-10	
	7

[2]

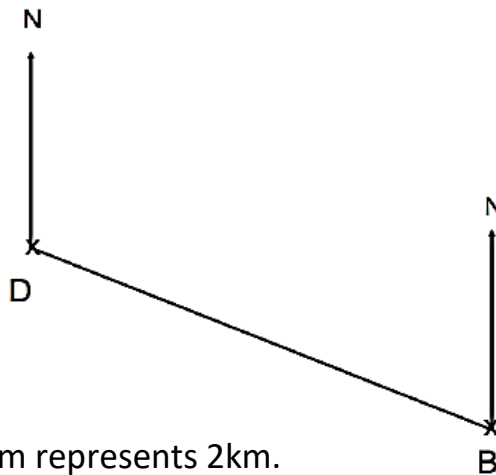
17) Complete these sentences with the correct rounded number.

307 021 correct to 2 significant figures is

0.0389647 correct to 3 significant figures is

[2]

18) The diagram shows the position of point B and point D.



The scale of the diagram is 1cm represents 2km.

a) Work out the actual distance between the dock and the boat.

.....km

b) Measure the bearing of the boat B from the dock D

.....° [2]

Good Luck 😊

Total Marks	<u> </u> 30
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