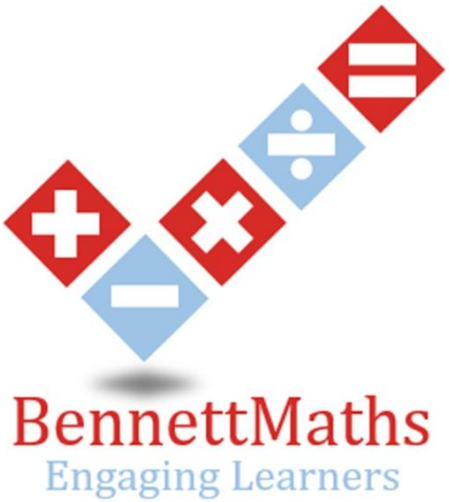


Name: _____

BennettMaths Edexcel 2F – Part 3

21 Write 84 as a product of its prime factors.

.....

(Total for Question 21 is 2 marks)

---

22 There are 48 counters in a bag.
There are only blue counters and green counters in the bag.

number of blue counters : number of green counters = 1 : 3

Hermione has to work out how many blue counters are in the bag.

She says,

"There are 16 blue counters in the bag because 1 is a third of 3 and 16 is a third of 48"

Is Hermione correct?
You must give a reason for your answer.

.....

.....

.....

(Total for Question 22 is 1 mark)

---

23 $-3 < n \leq 7$

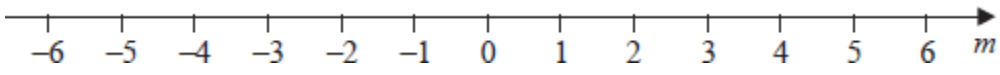
n is an integer.

(a) Write down the greatest possible value of n.

.....

(1)

(b) On the number line below, show the inequality $-5 < m \leq 2$



(2)

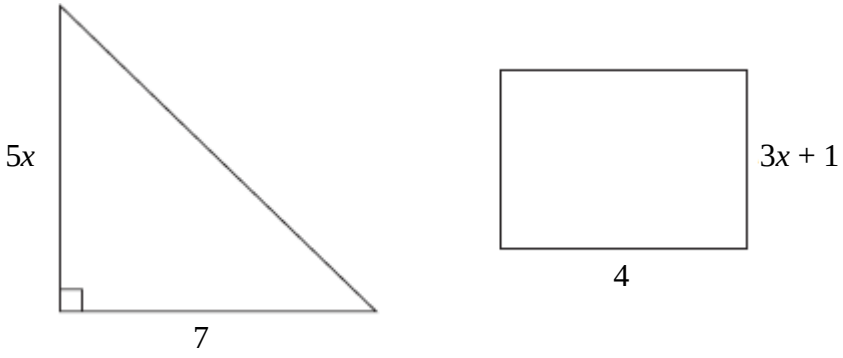
(*c*) Solve $\frac{4}{5}h - 6 < 10$

.....

(3)

(Total for Question 23 is 6 marks)

24 Here is a triangle and a rectangle.



All measurements are in centimetres.

The area of the triangle is 18 cm^2 greater than the area of the rectangle.

Work out the value of x.

x = ...

(Total for Question 24 is 4 marks)

25 Last month a farmer sold 900 kg of vegetables.
65% of these vegetables were turnips and parsnips.

weight of turnips : weight of parsnips = 9 : 4

Calculate the weight of parnsips the farmer sold.

..... kg

(Total for Question 25 is 3 marks)

26 A number, d, is rounded to 2 decimal places.
The result is 2.73

Complete the error interval for d.

..... $\leq d <$ .....

(Total for Question 26 is 2 marks)

---

27 Ronnie buys a house with a value of £280 000
The value of Ronnie's house increases by 2.5% each year.

Tom buys a house with a value of £260 000
The value of Tom's house increases by 6% each year.

At the end of 2 years, whose house has the greater value?
You must show how you get your answer.

(Total for Question 27 is 4 marks)

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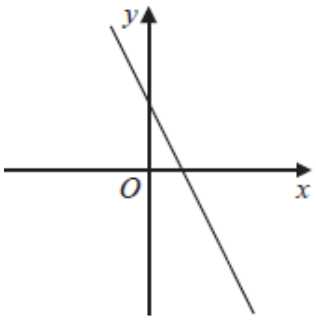
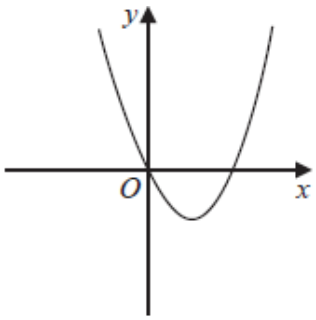
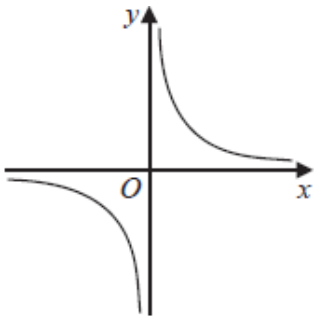
28 Here are five graphs.



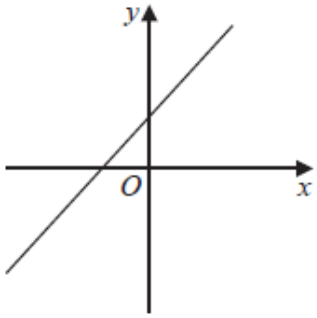
A



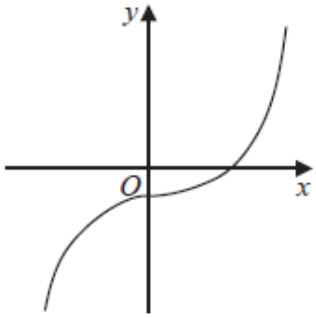
B



C



D



E

Equation	Graph
$y = \frac{2}{x}$	
$y = x + 4$	
$y = 6 - 3x$	
$y = x^3 - 3$	
$y = x^2 - 3x$	

Match the letter of each graph with its equation.

(Total for Question 28 is 3 marks)