

Edexcel GCSE Mathematics Calculator 2020 Higher Paper 2 Revision Worksheet

Question 10

(a) Simplify $\left(\frac{1}{m^2}\right)^0$

(b) Simplify $\frac{8x^{-4}}{x^{-4}}$

(c) Simplify $(3n^4w^2)^3$

Question 11

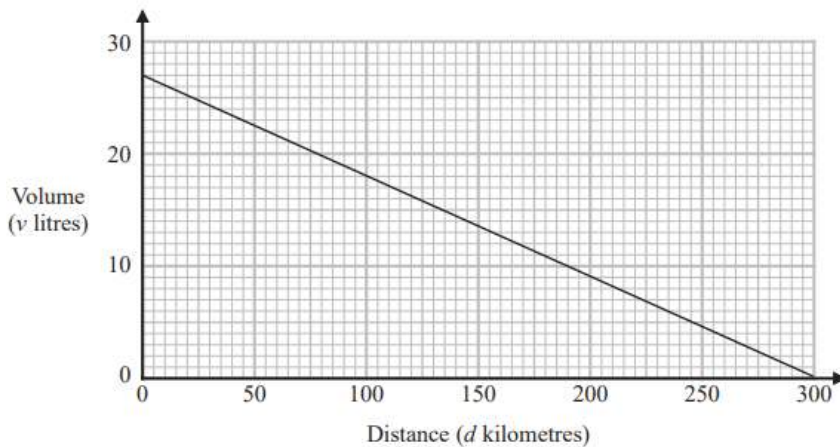
Jack is in a restaurant. There are 5 starters, 8 main courses and some desserts on the menu.

Jack is going to choose one starter, one main course and one dessert. He says there are 240 ways that he can choose his starter, his main course and his dessert.

Could Jack be correct? You must show how you get your answer.

Question 12

The graph gives information about the volume, v litres, of petrol in the tank of Jim's car after it has travelled a distance of d kilometres.

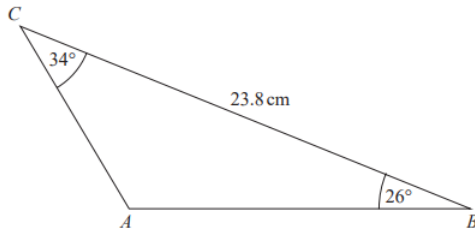


(a) Find the gradient of the graph.

(b) Interpret what the gradient of the graph represents.

Question 13

Here is triangle ABC.



. Work out the length of AB. Give your answer correct to 1 decimal place.

Question 14

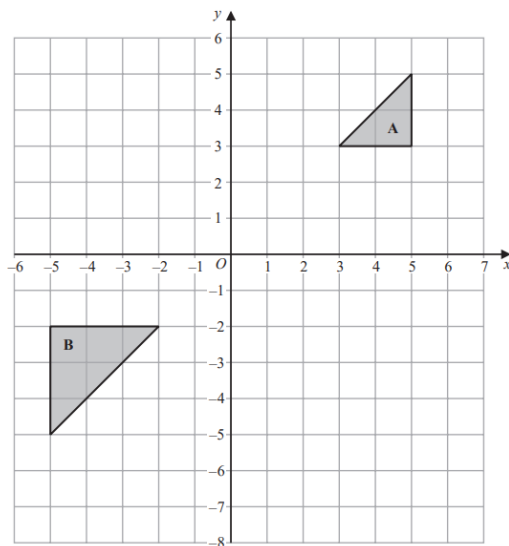
Here are two squares, A and B.



The length of each side of square B is 4 cm greater than the length of each side of square A.
The area of square B is 70 cm^2 greater than the area of square A.

Find the area of square B.
Give your answer correct to 3 significant figures.
You must show all your working.

Question 15



Describe fully the single transformation that maps triangle A onto triangle B.

Question 16

Here are the first five terms of a quadratic sequence: 10, 21, 38, 61, 90.

Find an expression, in terms of n , for the n th term of this sequence.

Question 17

Write down the coordinates of the turning point on the graph of $y = (x + 12)^2 - 7$.

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