Edexcel GCSE Mathematics Non Calculator 2020 Higher Paper 1 Revision Worksheet

Question 1

The first five terms of an arithmetic sequence are 1, 4, 7, 10, 13.

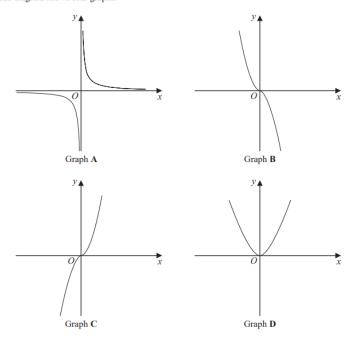
Write down an expression, in terms of n, for the nth term of this sequence.

Question 2

Show that
$$2\frac{1}{3} \times 3\frac{3}{4} = 8\frac{3}{4}$$

Question 3

The diagram shows four graphs.



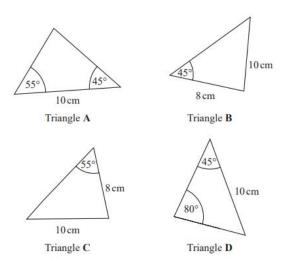
Each of the equations in the table is the equation of one of the graphs.

Complete the table.

Equation	Letter of graph
$y = -x^3$	
$y = x^3$	
$y = x^2$	
$y = \frac{1}{x}$	

Question 4

The diagram shows four triangles (A, B, C, D). Two of these triangles are congruent.



Write down the letters of these two triangles.

..... and

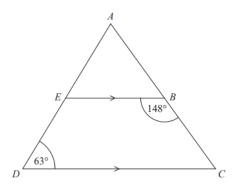
Question 5

Sean pays £10 for 24 chocolate bars. He sells all 24 chocolate bars for 50p each.

Work out Sean's percentage profit.

.....%

Question 6



Work out the size of angle EAB. You must give a reason for each stage of your working.

Question 7

The table shows information about the heights, in cm, of a group of Year 9 girls:

least height	150 cm
median	165 cm
greatest height	170 cm

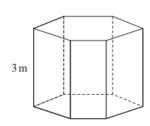
This stem and leaf diagram shows information about the heights, in cm, of a group of 15 Year 9 boys.

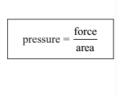
15	8 9 9
16	4 5 7 7 8
17	0 3 4 4 7
18	0 2

Compare the distribution of the heights of the girls with the distribution of the heights of the boys.

Question 8

The diagram shows a prism placed on a horizontal floor.





The prism has height 3m The volume of the prism is 18m3

The pressure on the floor due to the prism is 75 newtons/m^2 .

Work out the force exerted by the prism on the floor.

.....newtons

Question 9

Write these numbers in order of size. Start with the smallest number.

$$6.72 \times 10^{5}$$
, 67.2×10^{-4} , 672×10^{4} , 0.000672

Question 10

Given that
$$\frac{a}{b} = \frac{2}{5}$$
 and $\frac{b}{c} = \frac{3}{4}$, find $a: b: c$