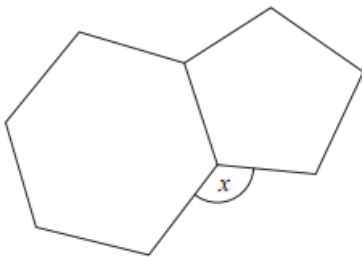


Edexcel GCSE Mathematics Non calculator 2022 Higher Paper 1 Revision Worksheet

1. Solve $7x - 27 < 8$
2. Write 124 as a product of its prime factors.
3. A delivery company has a total of 160 cars and vans. The number of cars : the number of vans = 3 : 7. Each car and each van uses electricity or diesel or petrol. $\frac{1}{8}$ of the cars use electricity. 25% of the cars use diesel. The rest of the cars use petrol. Work out the number of cars that use petrol. You must show all your working.
4. (a) Write 1.63×10^{-3} as an ordinary number.
(b) Write 438 000 in standard form.
(c) Work out $(4 \times 10^3) \times (6 \times 10^{-5})$. Give your answer in standard form.
5. Here is a regular hexagon and a regular pentagon.



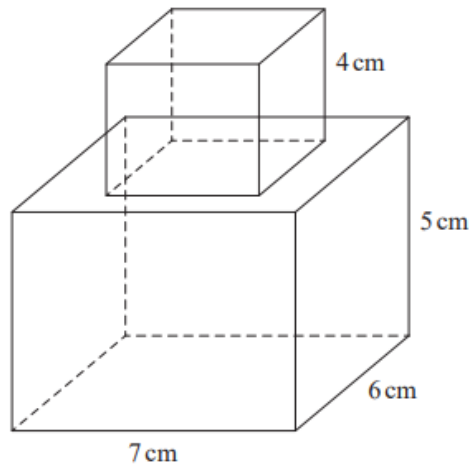
Work out the size of the angle marked x. You must show all your working.

- 6..The table shows the amount of snow, in cm, that fell each day for 30 days.

Amount of snow (s cm)	Frequency
$0 \leq s < 10$	8
$10 \leq s < 20$	10
$20 \leq s < 30$	7
$30 \leq s < 40$	2
$40 \leq s < 50$	3

Work out an estimate for the mean amount of snow per day.

7. A cube is placed on top of a cuboid, as shown in the diagram, to form a solid.



The cube has edges of length 4 cm.
The cuboid has dimensions 7 cm by 6 cm by 5 cm.
Work out the total surface area of the solid.

8. Cormac has some sweets in a bag.
The sweets are lime flavoured or strawberry flavoured or orange flavoured.

In the bag

number of lime : number of strawberry : number of orange
flavoured sweets : flavoured sweets : flavoured sweets = 9 : 4 : x

Cormac is going to take at random a sweet from the bag.

The probability that he takes a lime flavoured sweet is $\frac{3}{7}$

Work out the value of x.

9. Solve $\frac{1}{2x-1} + \frac{3}{x-1} = 1$. Give your answer in the form $\frac{p \pm \sqrt{q}}{2}$ where p and q are integers.

10. The centre of a circle is the point with coordinates $(-1, 3)$. The point A with coordinates $(6, 8)$ lies on the circle.

Find an equation of the tangent to the circle at A.

Give your answer in the form $ax + by + c = 0$ where a, b and c are integers.