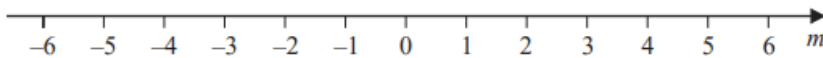


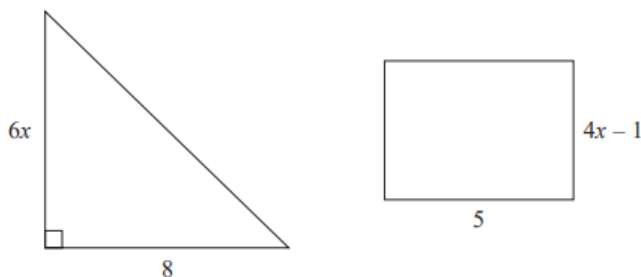
Edexcel GCSE Mathematics Calculator 2023 Higher Paper 2 Revision Worksheet

1. Work out the value of $\frac{25 - \sqrt{43.87}}{6 + 2.1^2}$. Write down all the figures on your calculator display.
2. Write 60 as a product of its prime factors.
3. There are 48 counters in a bag. There are only red counters and blue counters in the bag. The number of red counters : number of blue counters = 1 : 2. Helen says, "There are 24 red counters in the bag because 1 is half of 2 and 24 is half of 48." Is Helen correct? You must give a reason for your answer.
4. $-2 \leq n < 5$, where n is an integer.
 - (a) Write down the greatest possible value of n .
 - (b) On the number line below, show the inequality $-4 \leq m < 1$.



- (c) Solve $\frac{2}{5}g - 4 < 6$.
5. Here is a triangle and a rectangle. All measurements are in centimetres.
 - The triangle has base $6x$ and height 5.
 - The rectangle has sides 8 and $4x - 1$.
 - The area of the triangle is 10 cm^2 greater than the area of the rectangle.

Work out the value of x .



6. Last year a family recycled 800 kg of household waste. 57% of this waste was paper and glass. The weight of paper recycled : weight of glass recycled = 12 : 7. Calculate the weight of glass the family recycled.

7. A number, d , is rounded to 1 decimal place. The result is 12.

Complete the error interval for d . $\quad \leq d < \quad$

8. Tamsin buys a house with a value of £150,000. The value of Tamsin's house increases by 4% each year. Rachel buys a house with a value of £160,000. The value of Rachel's house increases by 1.5% each year. At the end of 2 years, whose house has the greater value? You must show how you get your answer.
9. The cumulative frequency table gives information about the ages of 80 people working for a company:

Age (a years)	Cumulative frequency
$20 < a \leq 30$	20
$20 < a \leq 40$	48
$20 < a \leq 50$	64
$20 < a \leq 60$	75
$20 < a \leq 70$	80

- (a) Draw a cumulative frequency graph for this information.

- (b) Use your graph to find an estimate for the median age.

10. A biased dice is thrown 60 times. The table shows information about the number that the dice lands on each time:

Number on dice	1	2	3	4	5	6
Frequency	12	7	8	9	9	15

- (a) Work out an estimate for the probability that the dice will land on 6 both times when thrown twice.

- (b) Sally is going to throw the same dice n times and record the number it lands on each time. She will use her results to work out a more reliable estimate for the probability in part (a). What can you say about the value of n ?