

National 5

Short Task 3

Round all answers to an appropriate degree of accuracy unless specifically stated

1a. Factorise  $x^2 + 3x - 18$

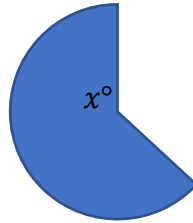
1b. Hence simplify

$$\frac{x^2 + 3x - 18}{2x^2 - 18}$$

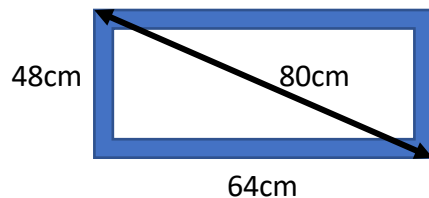
2. Simplify  $3\sqrt{3} + \sqrt{12} + \sqrt{48}$

3. Find the equation of the line with a gradient of 4 passing through the point (3,-4)

4. The sector shown below has an area of  $922 \text{ cm}^2$ . If the radius is  $23 \text{ cm}$ , calculate the angle  $x^\circ$  at the centre.



5. James has been making a rectangular picture frame. It is shown in the diagram. Check if the frame is in fact rectangular.



6. House prices decreased this year by 14% on last years price. Last year, the average price was £98 500. Calculate the average cost this year.

Round your answer to the nearest £100.