④ **a** Show that the equation $x(x - 8) - 7 = x(5 - x)$ can be rearranged to
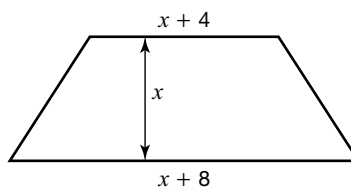$2x^2 - 13x - 7 = 0$. (2 marks, ★★★)

> **NAILIT!**
>
> If a quadratic equation appears in a problem, always check whether both solutions are possible or only one of them.

b Hence find the solutions to $x(x - 8) - 7 = x(5 - x)$. (3 marks, ★★★★)

....

[Total: 5 marks]

⑤ The diagram shows a trapezium with the sides measured in cm.

The trapezium has an area of 16 cm².

Find the value of x. (4 marks, ★★★★★)

> **NAILIT!**
>
> Area of a trapezium
> $= \frac{1}{2}(a + b)h$
> where a and b are the lengths of the two parallel sides and h is the distance between them.

....