

**15** A curve has equation  $y = x^3 - 48x$

The point  $A$  on the curve has  $x$  coordinate  $-4$

The point  $B$  on the curve has  $x$  coordinate  $-4 + h$

**15 (a)** Show that the gradient of the line  $AB$  is  $h^2 - 12h$

**[4 marks]**

**15 (b)** Explain how the result of part **(a)** can be used to show that  $A$  is a stationary point on the curve.

**[2 marks]**