

Name: KEY

Date: _____

Pre-Calculus 11: Section 5.4 Quiz

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1) Complete the square to get the standard form quadratic function into vertex form (3 marks).

$$y = -3x^2 + 12x - 7$$

$$y = -3(x^2 - 4x) - 7$$

$$y = -3(x^2 - 4x + 4 - 4) - 7$$

$$y = -3(x^2 - 4x + 4) + 12 - 7$$

$$y = -3(x - 2)^2 + 5$$

$b = -4$
 $\frac{b}{2} = -2$ save!
 $(\frac{b}{2})^2 = 4$ use!

ANSWER:

$$y = -3(x - 2)^2 + 5$$