

HOMEWORK...

Questions

Worksheet - Standard to Vertex (any value of a).pdf

7, 3, 10

$$\begin{aligned} \textcircled{3} \quad y &= -x^2 + 6x - 7 && y_{\text{int}} (0, -7) \\ y &= -1(x^2 - 6x) - 7 \\ y &= -(x^2 - 6x + 9) - 9(-1) - 7 \\ y &= -(x-3)^2 + 2 && \text{vertex} (3, 2) \end{aligned}$$

$$\begin{aligned} \textcircled{10} \quad y &= 15x^2 - 180x + 538 && y_{\text{int}} (0, 538) \\ y &= 15(x^2 - 12x) + 538 \\ y &= 15(x^2 - 12x + 36) - 36(15) + 538 \\ y &= 15(x-6)^2 - 2 && \text{vertex} (6, -2) \end{aligned}$$

①

$$y = -\frac{2}{5}x^2 - \frac{16}{5}x - \frac{32}{5}$$

OR) $5y = 2x^2 - 16x - 32$

$$y = -\frac{2}{5}(x^2 + 8x) - \frac{32}{5}$$

$$y = -\frac{2}{5}(x^2 + 8x + 16) - 16\left(\frac{-2}{5}\right) - \frac{32}{5}$$

$$y = -\frac{2}{5}(x+4)^2$$

vertex $(-4, 0)$

$-\frac{16}{5} \div -\frac{2}{5}$
 $-\frac{16}{5} \cdot \frac{5}{-2}$
 8

Attachments

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