

Review packet

4.) $x^2 - 4x + 4 = 7 + 4$

B

$$\left(\frac{4}{2} = 2^2\right)$$
$$(x - 2)^2 = 11$$

$$x - 2 = \pm\sqrt{11}$$
$$x = 2 \pm \sqrt{11}$$

$$31.) A = Pe^{rt}$$

$$y = ae^{kt}$$

$$\ln 2 = \ln ae^{4k}$$

$$\frac{\ln 2}{4} = \frac{4k}{4}$$

$$k = 0.1732867951$$

$$y = ae^{0.1732867951t}$$

$$\ln 10000 = \ln e^{0.1732867951t}$$

$$\frac{\ln 10000}{0.1732867951} = 0.1732867951t$$

$$t = 53.15 \dots$$

A

$$27.) \quad \frac{24 \text{ miles}}{3 \text{ hrs.}} = 8 \text{ mph}$$

D

$$8 + 15 = 23 \text{ mph}$$

$$30.) \begin{array}{ccc|c} 1 & -1 & 1 & -2 \\ \hline 3 & 1 & 2 & 7 \\ \hline \end{array}$$

$$(x-3)(x^2+2x+7)$$

A