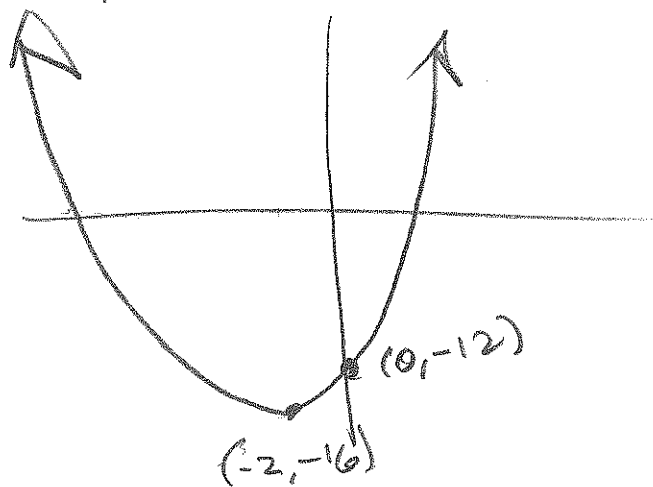
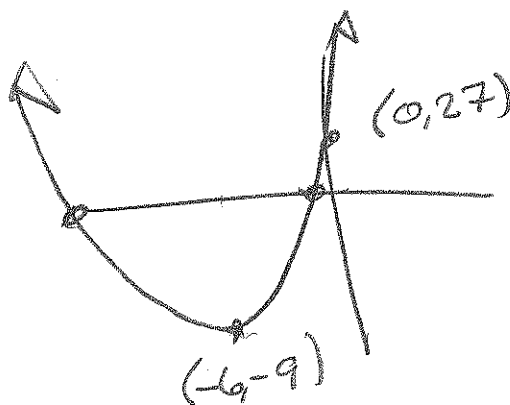


099 § 7.1 II SEE § 7.1 I!

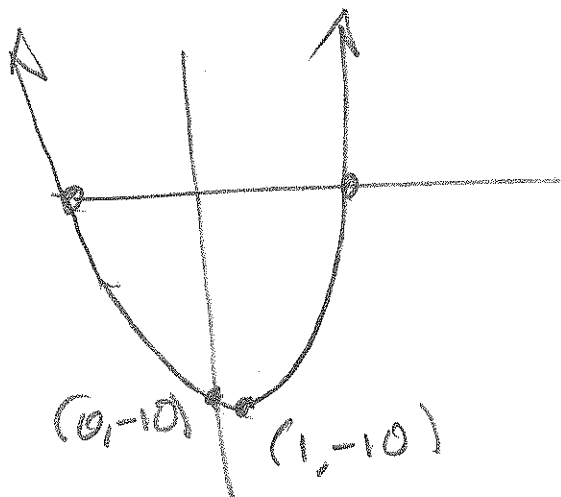
$$\begin{aligned} \textcircled{1} \quad & x^2 + 4x - 12 \\ &= x^2 + 4x + 2^2 - 4 - 12 \\ &= \boxed{(x+2)^2 - 16} \end{aligned}$$



$$\begin{aligned} \textcircled{2} \quad & x^2 + 12x + 27 \\ &= x^2 + 12x + 6^2 - 36 + 27 \\ &= \boxed{(x+6)^2 - 9} \end{aligned}$$



$$\begin{aligned} \textcircled{3} \quad & 2x^2 - 4x - 8 \\ &= 2(x^2 - 2x) - 8 \\ &= 2(x^2 - 2x + 1^2) - 2(1)^2 - 8 \\ &= 2(x-1)^2 - 10 \end{aligned}$$



099 § 7.1 II

$$(4) \quad 4x^2 - 3x + 5$$

$$= 4\left(x^2 - \frac{3}{4}x\right) + 5$$

$$= 4\left(x^2 - \frac{3}{4}x + \left(\frac{3}{8}\right)^2\right) - 4\left(\frac{3}{8}\right)^2 + 5$$

$$= 4\left(x - \frac{3}{8}\right)^2 + \frac{71}{16}$$

$$-4\left(\frac{9}{64}\right) + 5$$

$$= -\frac{9}{16} + 5$$

$$= -\frac{9}{16} + \frac{5}{1} \cdot \frac{16}{16}$$

$$= \frac{-9 + 80}{16} = \frac{71}{16}$$

