SOLVING & FACTORING STEPS

1. One Side $= 0$

2. Factor Like Normal

3. Set each $= 0$
   & Solve

SOLVE BY FACTORING

$a = 1$ $b = 6$ $c = 5$

$x^2 + 6x + 5 = 0$

$$5 \times 1$$
$$6$$

$(x^2 + 5x + 1x + 5) = 0$

$(x + 5)(1x + 5)$

$x(x + 5) + 1(x + 5) = 0$

$(x + 1)(x + 5) = 0$

$x + 1 = 0$
$\underline{-1 \quad -1}$
$x = -1$

$x + 5 = 0$
$\underline{-5 \quad -5}$
$x = -5$

SOLVE BY FACTORING

$$2x^2 + 7x + 6 = 0$$

$$\left(\frac{2x^2}{x} + \frac{3x}{x}\right)\left(\frac{4x}{2} + \frac{6}{2}\right) = 0$$

$a \cdot c$

$\frac{12}{}$

③   ④

$\frac{7}{b}$

$$x(2x+3) + 2(2x+3) = 0$$

$$x + 2 = 0 \qquad 2x + 3 = 0$$
$$\quad\; -2\; -2 \qquad\;\; -3\; -3$$

$$\boxed{x = -2} \qquad \frac{2x}{2} = \frac{-3}{2}$$

$$\boxed{x = \frac{-3}{2}}$$

SOLVE BY FACTORING

$m^2 + 4m = 21$

$-21 \ -21$

-21

$\boxed{7}$　$\boxed{-3}$

4
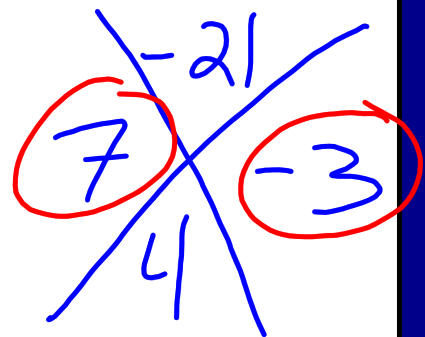
$m^2 + 4m - 21 = 0$

$(m^2 + 7m)(-3m - 21) = 0$

$m(m + 7) - 3(m + 7) = 0$　　$m - 3 = 0$

$m + 7 = 0$

$m = \{-7 | 3\}$