Solve each by factoring.

1. $6x^2 - 28 = 2x$ $x = 7/3, -2$

$6x^2 - 2x - 28 = 0$

$6x^2 - 2x - 28 = 0$

$2(3x^2 - 1x - 14) = 0$

-42, -7, $+6$, -1

$3x - 7$, $x + 2$

$3x^2$	$-7x$
$+6x$	-14

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

2. $8x^2 + 12x = 0$ GCF

$4x(2x + 3) = 0$

$x = -3/2, 0$

Solve each using square roots.

Leave non-integer answers in simpified radical form.

3. $7x^2 + 11 = 39$

$x^2 = 4$

$x = \pm 2$

4. $2x^2 + 40 = 8$ No Real Sol.

$\frac{2x^2}{2} = \frac{-32}{2}$

$\sqrt{x^2} = \sqrt{-16}$

5. $3x^2 - 2 = 70$

$3x^2 = 72$

$\sqrt{x^2} = \sqrt{24} \rightarrow \sqrt{4 \cdot 6}$

$\pm 2\sqrt{6}$