# 4.5c Solve Quadratic Eqn's

* Just like equations

$2x^2 = 18$ ← ÷ by 2

$x^2 = 9$ ← $\sqrt{\ }$ both sides

$x = \pm 3$ ← get + & − answer when $\sqrt{\ }$ a variable

Solve

① $z^2 - 7 = 42$

$\sqrt{z^2 + 7} = \sqrt{49}$

$z = \pm 7$

② $3x^2 + 5 = 41$

$\frac{3x^2}{3} = \frac{36}{3}$

$x^2 = \sqrt{12}$

$x = \pm\sqrt{12}$ ← $\sqrt{12} = \sqrt{4}\sqrt{3}$

$x = \pm 2\sqrt{3}$

Homework

22) $5^2 = 169$ 23) $a^2 = 50$ 24) $x^2 = 84$

25) $6z^2 = 150$

$\sqrt{z^2} = \sqrt{25}$

$z = \pm 5$

26) $4p^2 = 448$ 27) $-3w^2 = -213$

28) $7r^2 - 10 = 25$ 29) $\frac{x^2}{25} - 6 = -2$ 30) $\frac{t^2}{20} + 8 = 15$

31) $4(x-1)^2 = 8$

$\frac{4}{4}$

$\sqrt{(x-1)^2} = \sqrt{2}$

$x - 1 = \pm\sqrt{2}$

$+1 \quad +1$

$x = 1 \pm \sqrt{2}$