SOLVING EQUATIONS

* multiply by the common denom

Solve for x.

$$5(4-2x) = x - 3(2x-1)$$

$$20 - 10x = x - 6x + 3$$

$$20 - 10x = -5x + 3$$
$$-3 + 10x \qquad +10x - 3$$

$$\frac{17}{5} = \frac{5x}{5}$$

$$\boxed{\frac{17}{5} = x}$$

$$15\left[\frac{4}{3}x - 2 = \frac{2}{5}(x+4) + 1\right]$$

$$20x - 30 = 6(x+4) + 15$$

$$20x - 30 = 6x + 24 + 15$$

$$20x - 30 = 6x + 39$$
$$-6x \ +30 \qquad -6x \ +30$$

$$\frac{14x}{14} = \boxed{\frac{69}{14}}$$

More on next page.

Solve for a.

$$2\left[h = \frac{1}{2}at^2 + vt\right]$$

$$2h = at^2 + 2vt$$

$$\frac{2h - 2vt}{t^2} = \frac{at^2}{t^2}$$

$$\frac{2h - 2vt}{t^2} = a$$

1) Get rid of fractions
2) Move terms that are + or −
3) Divide remaining coefficients.

If x's cancel and you are left with something like 3 = 8, the is not true and the answer is No Solution.

If the x's and numbers cancel and you are left with 0 = 0, then the answer is All Real Numbers.