Warm - Up

Solve the following equation:

$$\frac{4}{5}x - 20 = -3$$

$$+20 \qquad +20$$

$$\frac{5}{4} \cdot \frac{4}{5}x = \frac{17}{1} \cdot \frac{5}{4}$$

$$\boxed{X = \frac{85}{4}}$$
$$\boxed{X = 21\frac{1}{4}}$$

Evaluate the expression

$-x^2 - 3y$ when $x = -3$ and $y = -5$

$$-(-3)^2 - 3(-5)$$

$$-9 + 15$$

$$\boxed{6}$$

Solving Multi Step Equations

*** Simplify first, then solve!

$3(x+4) = 27$

$3x + 12 = 27$
$ -12 \quad -12$

$\dfrac{3x}{3} = \dfrac{15}{3}$

$\boxed{x = 5}$

$-7x + 9x + 4 = 20$

$2x + 4 = 20$
$ -4 \quad -4$

$\dfrac{2x}{2} = \dfrac{16}{2}$

$\boxed{x = 8}$

$7x + 2(-4x + 6) = 162$

$7x - 8x + 12 = 162$

$-x + 12 = 162$
$ -12 \quad -12$

$\dfrac{-x}{-1} = \dfrac{150}{-1}$

$\boxed{x = -150}$

$3 - 4(2x - 1) = 23$

$\cancel{-1(2x-1) = 23}$

$3 - 8x + 4 = 23$

$-8x + 7 = 23$
$ -7 \quad -7$

$\dfrac{-8x}{-8} = \dfrac{16}{-8}$ $\boxed{x = -2}$

You Try!

$3(3x-7) + 4x = 26$

$9x - 21 + 4x = 26$

$13x - 21 = 26$
$ +21 \quad +21$

$\frac{13x}{13} = \frac{47}{13}$

$x = \frac{47}{13}, 3\frac{8}{13}$

$2 \cdot \dfrac{4x + 8}{2} = -64 \cdot 2$

$4x + 8 = -128$
$ -8 \quad\quad -8$

$\frac{4x}{4} = \frac{-136}{4}$

$X = -34$

$2(x+3) - 5(x-1) = 32$

$2x + 6 - 5x + 5 = 32$

$-3x + 11 = 32$
$ -11 \quad -11$

$\frac{-3x}{-3} = \frac{21}{-3}$

$X = -7$

$17 = \frac{2}{3}(3x + 6) - x$

$17 = 2x + 4 - x$

$17 = x + 4$
$-4 \quad\quad -4$

$X = 13$