

Period 3: Warm-Up

Evaluate the expression (aka find what it simplifies to)

$$1) 162 \div [6(7-4)^2]$$

$$162 \div [6(9)]$$

$$162 \div 54$$

$$= 3$$

$$2) \frac{(2 \cdot 5)^2 + 4}{3^2 - 5} = \frac{104}{4}$$

$$\frac{10 \cdot 10}{3 \cdot 3} = \frac{10^2 + 4}{3^2 - 5} = \frac{104}{4} = 26$$

$$3) 15(14 - 39 \div 3) + 4 \cdot \frac{1}{4}$$

$$15(14 - 13) + 1$$

$$15 \cdot (1) + 1$$

$$15 + 1$$

$$16$$

1.1 Solving Simple Equations

Properties

Addition

$$\text{If } a = b \text{ then } a + c = b + c$$

Subtraction

$$\text{If } a = b \text{ then } a - c = b - c$$

Ex) a) $x - 3 = -5$
 $+3 \quad +3$
 $x = -2$

b) $0.9 = y + 2.8$
 $-2.8 \quad -2.8$
 $-1.9 = y$
 $y = -1.9$

You Try!

a) $n + 3 = -7$
 $-3 \quad -3$
 $n = -10$

b) $g - \frac{1}{3} = -\frac{2}{3}$
 $+\frac{1}{3} \quad +\frac{1}{3}$

 $g = -\frac{1}{3}$
 $g = -\frac{1}{3}$

c) $-6.5 = p + 3.9$
 $-3.9 \quad -3.9$
 $-10.4 = p$

Properties

Multiplication

$$\text{If } a=b \text{ then } a \cdot c = b \cdot c$$

Division

$$\text{If } a=b \text{ then } \frac{a}{c} = \frac{b}{c}$$

Ex) a) $-\frac{n}{5} = -3$

$$\cancel{-5} \cdot \frac{n}{5} = -3 \cdot \cancel{-5}$$

$$n = 15$$

b) $\frac{\pi \cdot x}{\pi} = \frac{-2\pi}{\pi}$

$$x = -2$$

c) $\frac{1.3 \cdot z}{1.3} = \frac{5.2}{1.3}$

$$z = 4$$

You Try!

a) $\frac{y}{3} = -6$

b) $9 \cdot \pi = \pi \cdot x$

c) $0.05w = 1.4$

In the Olympic trials, Usain Bolt won the 200-m dash with a time of 19.35 seconds.

What was his average speed?

Hint:

