Section 2.4

Variables and Equations

Goal: to solve equations with variables

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equation:

$\underline{\text{Shows two expressions}}$
have the same value

Ex:

$16(4) = X$

$\widehat{2(7)} = \widehat{50}$

$7 \neq 4$ ⌀

symbols:

$=$ equals

$2 \times (7) = 50$ $\neq$ not equal to

$2(10)(7) \stackrel{?}{=} 50$ $\stackrel{?}{=}$ is it equal

Write the equation:

a). The sum of p and 15 is -3

$p + 15 = -3$

b). 10 is the product of -2 and a number r. $10 = -2(r)$

$-2r = 10$

c). The quotient of n and 2 is 14.

$\frac{n}{2} = 14$

Is it a solution?

17 - x = 12,   x = -5

$17 + (+5) \stackrel{?}{=} 12$ No

$22 \neq 12$

$\frac{p}{3} = 6$,   p = 2

$\frac{2}{3} \stackrel{?}{\neq} 6$ No

Solve using mental math:

x + 3 = 11 $x = 8$

16 - m = 9 $m = 7$

$3 = \dfrac{x}{7}$ $x = 21$

2 - n = -6 $n = 8$

Write the equation and solve:

If go-cart rides cost $5 each at a county fair and the operator takes in $1000 total for the first day of the fair, how many times did people ride the go-carts that day?

$5x = 1000$

What is the difference between an equation and an expression?
Give an example of each.

Equation:

Expression:

Hwk: pg. 87 - 89

#7, 8, 11-19 all, 20-32(4th), 35, 40-43 all, 50 - 52 all