

W-A2 Algebra 2 week 6

$$\begin{array}{r} |p-1| - 5 = 2 \\ +5 \quad +5 \end{array}$$

$$|7| = |-7| = 7$$

$$|p-1| = 7$$

$$\begin{array}{r} p-1 = 7 \\ +1 \quad +1 \\ \hline p = 8 \end{array}$$

$$\begin{array}{r} p-1 = -7 \\ +1 \quad +1 \\ \hline p = -6 \end{array}$$

Isolate Absolute Value
Split
Actual Answer
Opposite Answer

$$|a-5| = -9$$

no solution

$$\frac{-3|a-5|}{-3} = \frac{-9}{-3}$$

$$|a-5| = 3$$

$$\begin{array}{r} a-5 = 3 \\ +5 \quad +5 \\ \hline a = 8 \end{array}$$

$$\begin{array}{r} a-5 = -3 \\ +5 \quad +5 \\ \hline a = 2 \end{array}$$

$$\begin{array}{r} |x+3| + 9 = 6 \\ -9 \quad -9 \end{array}$$

$$|x+3| = -3$$

no solution

$$\begin{array}{r} |x+3| - 9 = -5 \\ +9 \quad +9 \end{array}$$

$$|x+3| = 4$$

$$|2x+5| + 2 = 3x$$

-2 -2

check your work!

$$|2x+5| = 3x - 2$$

rewrite

$$2x + 5 = 3x - 2$$

-2x -2x

$$5 = x - 2$$

+2 +2

$$7 = x$$

$$3(7) - 2 = 19$$

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

$$2x + 5 = -3x + 2$$

+3x +3x

$$5x + 5 = 2$$

-5 -5

$$5x = -3$$

5 5

~~$$x = \frac{3}{5}$$~~

$$3\left(\frac{-3}{5}\right) - 2$$

$$-\frac{9}{5} + (-2)$$

$$-\frac{9}{5} - 2 = \ominus$$

$$|3x+3| - 6 = 6x$$

+6 +6

$$|3x+3| = 6x + 6$$

$$6x + 6$$

$$6(-1) + 6$$

$$-6 + 6 = 0$$

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$$3x + 3 = 6x + 6$$

-3 -3

$$3x = 6x + 3$$

-6x -6x

$$-3x = 3$$

-3 -3

$$x = -1$$

$$3x + 3 = -(6x + 6)$$

$$3x + 3 = -6x - 6$$

+6 +6

$$3x + 9 = -6x$$

-3x -3x

$$9 = -9x$$

-9 -9

$$x = -1$$

$$|3x - 9| \leq 12$$

opposite number!
flip inequality

$$3x - 9 \leq 12$$

$$+9 \quad +9$$

$$\frac{3x}{3} \leq \frac{21}{3}$$

$$x \leq 7$$

$$3x - 9 \geq -12$$

$$+9 \quad +9$$

$$\frac{3x}{3} \geq \frac{-3}{3}$$

$$x \geq -1$$




$$|9x + 3| \leq -8$$

no solution

$$|9x + 3| \geq -8$$

all real numbers

1-6	Probability	Twizzlers	kit kats	Reese's	Twix
		10	12	16	2

$$P(\text{Twizzlers}) = \frac{\text{desired outcomes}}{\text{total possible}} = \frac{10}{40} = \left(\frac{1}{4}\right)$$

$$P(\text{Reese's or kit kat}) = \frac{12 + 16}{40} = \frac{28 \div 4}{40 \div 4} = \left(\frac{7}{10}\right)$$

$$P(\text{not Twix}) = \frac{40 - 2}{40} = \frac{38 \div 2}{40 \div 2} = \left(\frac{19}{20}\right)$$

by Twizzler	kit kats	Reese's	Twix
10	12	16	2

P(Twizzler, then Reese's with replacement)

$$\frac{10}{40} = \frac{1}{4}$$

$$\frac{16}{40} = \frac{2}{5}$$

$$\frac{1}{4} * \frac{2}{5} = \frac{2}{20} \stackrel{\div 2}{=} \frac{1}{10}$$

P(Twizzler then Reese's without replacing)

$$\frac{1}{4} \stackrel{\div 4}{=} \frac{1}{16}$$

$$\frac{16}{39}$$

$$\frac{1}{16} * \frac{4}{39} =$$

$$\frac{4}{39}$$

Quiz 4 due tonight
 Quiz 5 due Oct 21st
 HW 1-6 evens
 Online HW 6 (Fri)
 Quiz 6 (Fri) 1-6 + Rev.
 1-5/1-6
hard
Pre-Test
 due Oct 28th