S-PA Pre-Algebra Session 3 6/20

1.) The product of 3 and a number. (variable)

$3x$ $3*x$

2.) 8 more than the difference between 9 and c

(+) (−)

$8+9-c$ $8+(9-c)$ $(9-c)+8$

3.) 4 less than y (switch)

$y-4$

4.) The quotient of 9 and the sum of b and 2

$9\div(b+2)$ or $\frac{9}{b+2}$

5.) 2 less than the product of x and 5.

$5x-2$ or $(5*x)-2$

P E MD AS P E PM AS

$4\cdot 9+8\div 2-6\cdot 5$

$36+8\div 2-6\cdot 5$

$36+4-6\cdot 5$

$36+4-30$

$40-30=10$

1.) $3 \cdot 8 + 12 \div 4 - 7$

$24 + 12 \div 4 - 7$

$24 + 3 - 7$

$27 - 7 = \boxed{20}$

2.) $3[9 - 4 \cdot 2 + 3(4-2)]$ $\quad 3(2)$ or $3*2$

$3[9 - 4 \cdot 2 + 3(2)]$

$3[9 - 8 + 3(2)]$

$3[9 - 8 + 6]$

$3[1 + 6]$ $\quad 3[7] = \boxed{21}$

3.) $5 + 48 \div 4 - 8 + 2 \cdot 7$

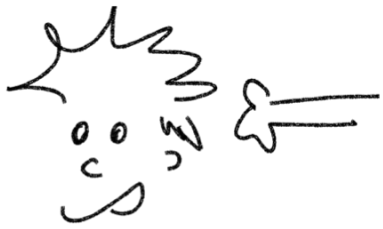
$5 + 12 - 8 + 2 \cdot 7$

$5 + 12 - 8 + 14$

$17 - 8 + 14$

$9 + 14 = \boxed{23}$

Spidr-Man



Pete Parker

Evaluate

$2n - 7$

$n = 8$ ← input

Substitute 8 in for n

$2(8) - 7$

$16 - 7 = \boxed{9}$ ← output

$4ab$

$a = 2 \quad b = 5$

$4 * a * b$

~~$4 2 5$~~

$4 * 2 * 5$

$8 * 5 = \boxed{40}$

1.) $\frac{6}{a} + b$ $a=3$ $b=7$

$\frac{6}{3} + 7 = 2 + 7 = \boxed{9}$

2.) $15a - 2(b+c)$ $a=4$ $b=2$ $c=3$

$15(4) - 2(2+3)$ $60 - 10 = \boxed{50}$

$15(4) - 2(5)$

3.) $x + 3y - 4(z-3)$ $x=4$ $y=6$ $z=5$

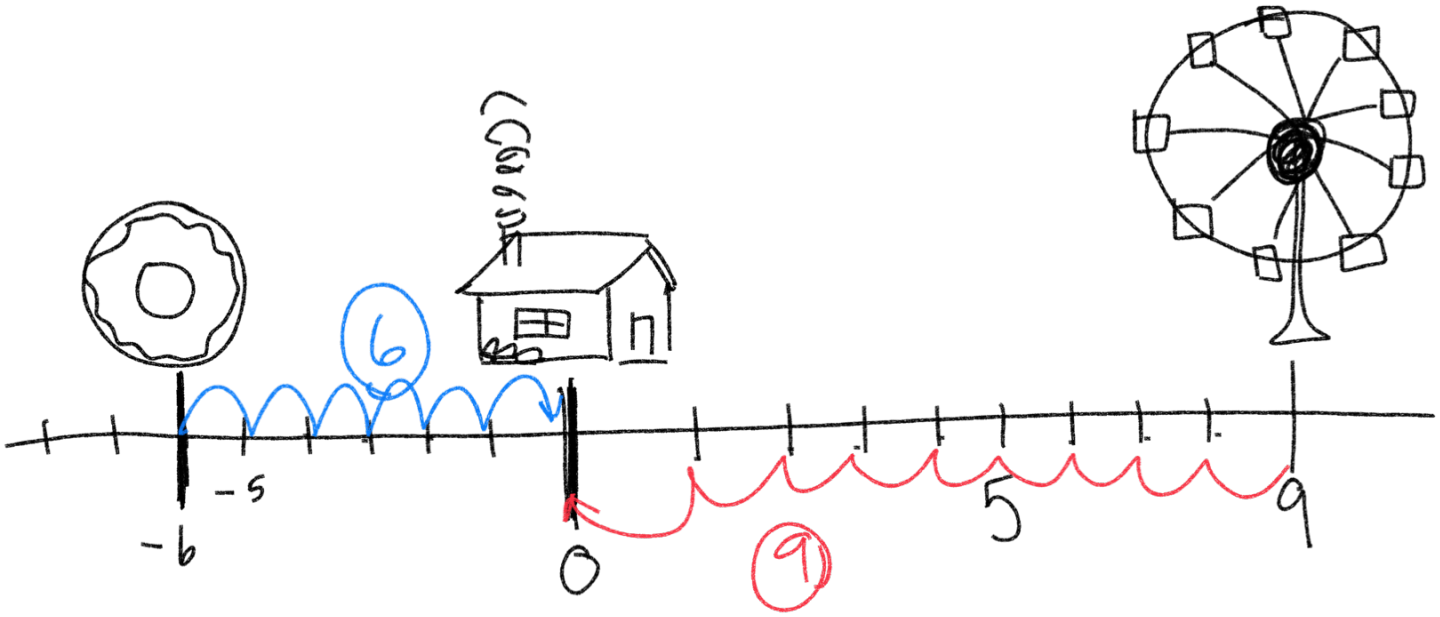
$4 + 3(6) - 4(5-3)$

$4 + 3(6) - 4(2)$

$4 + 18 - 4(2)$

$4 + 18 - 8$

$22 - 8 = \boxed{14}$



Absolute Value

Distance from a number to zero on the number line

$|9| = 9$

$|-6| = 6$

$-|-3| = -3 = -3$

$|10| = 10$

$|-523| = 523$

$|9| = 9$

$|-17| = 17$

$|(3-5)| = |-2| = 2$

Inequalities

$>$ Greater than

$<$ Less than

points to the left

'left' than

3 5

SMALLER

BIGGER

$-6 < -3$

LEFT

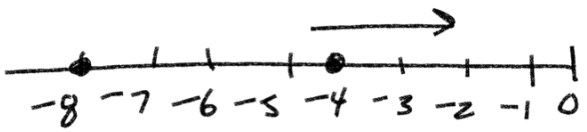
RIGHT

-6 -3 0

1.) $2 \leq 3$

Less than

2.) $-4 \geq -8$



3.) $0 \geq -2$

4.) $|-3| \_\_ |-2|$

$3 > 2$

5.) $|-6| \_\_ -1$

$6 > -1$

6.) $-|-2| \_\_ -1$

$-2 < -1$

7.) $|-5| \_\_ 5$

$5 = 5$

$-|3| = -3$