

## Pre-Algebra Chapter 1 Pre-Test

Write a variable expression for each word phrase.

- 1.) The product of a number and 4.

$$\boxed{x * 4} \quad \boxed{4x}$$

- 2.) The sum of k and 7.

$$\boxed{k + 7}$$

- 3.) The difference between 12 and b.

- 4.) The quotient of f and 11.

$$\boxed{f \div 11}$$

- 5.) 3 less than g.

$$\text{switch order} \quad \boxed{g - 3}$$

- 6.) Two times the quantity 8 plus w.

$$\boxed{(8+w)*2} \quad \boxed{2(8+w)}$$

Simplify each expression.

1.)  $3 \times 2 + 16 \div 4 - 3$

PEMDAS!!

2.)  $8 + \underbrace{24 \div 4}_{6} \times 10 - 2$

$$8 + \underbrace{6 * 10 - 2}_{60 - 2}$$

$$\underbrace{8 + 60 - 2}_{68 - 2}$$

$$68 - 2 = \boxed{66}$$

3.)  $12 - 3(8 + 2)$

$$12 - 3(10) = 12 - 3 * 10$$

\*

$$12 - 30 = \boxed{-18}$$

4.)  $68 - 12 \div 2 \div 3$

Evaluate the expression. Calculator OK

1.)  $8a + 2(b - c)$ , for  $a = 3$ ,  $b = 7$ , and  $c = 4$

$$8(3) + 2(7-4)$$

$$8(3) + 2(3)$$

$$24 + 6 = \boxed{30}$$

$$8a = 8 * a$$

$$8a = a + a + a + a \dots$$

2.)  $3x - 2y + y(9 - 4)$ , for  $x = 4$  and  $y = 2$

3.)  $def + 6e$ , for  $d = 6$ ,  $e = 2$ ,  $f = 3$

$$(6)(2)(3) + 6(2)$$

$$12(3) + 12$$

$$36 + 12 = \boxed{48}$$

$$def = d * e * f$$

4.)  $\frac{ab}{2} - 3$ , for  $a = 7$ ,  $b = 8$

Compare. Use  $>$ ,  $<$ , or  $=$  to complete each statement.

1.)  $-6 \underline{\quad} -7$

$>$   
Greater  
than

$<$   
less  
than

2.)  $-3 \underline{\quad} |-8|$

3.)  $|-12| \underline{\quad} |-5|$   
 $12 > 5$

~~|-5|~~ opens to  
bigger  
number

4.)  $2 \underline{\quad} -|-9|$

Find each sum or difference of each.

No Calculators

1.)  $-8 + (-5)$

$\boxed{-13}$

same  $\rightarrow$  sum

$8 + 5 = 13$

2.)  $9 + 3$

3.)  $-6 + 8$

$\boxed{2}$

Different  $\rightarrow$  difference

$8 - 6 = 2$

4.)  $4 + (-11)$

1.)  $8 - 12 = 8 + (-12) = \boxed{-4}$

2.)  $-9 - 4$

3.)  $3 - (-5)$   
+  
 $3 + 5$

$3 + 5 = \boxed{8}$

4.)  $-12 - (-6)$

5.)  $9 - 7$

Solve by looking for the pattern.

- 1.) Ninja played Fortnite for six consecutive days. The first day he streamed 4 matches. The second day he streamed 9 matches. On the third day he streamed 14 matches. If he continues to stream games at the same rate, how many matches will he stream on the sixth day.

- a) Complete the table.

Day	1	2	3	4	5	6
Games Played	4	9	14	19	24	29
Change in Games Played	-	5	5	5	5	5

- b) Describe the pattern.

Add 5

- c) How many games will he stream on the sixth day?

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Find each.

No Calculator

1.)  $8 \times -5 = \boxed{-40}$

2.)  $7 \times 3$

3.)  $-9 \times 4$

4.)  $-8 \times -2 = \boxed{16}$

5.)  $-56 \div -7$

8

No Calculators!

6.)  $84 \div -12$

7.)  $24 \div 6$

8.)  $-45 \div 15$

-3

**Label each quadrant.** Next, plot the points below.

1.) A (6, -4)

2.) B (-7, 2)

3.) C (0, 8)

4.) D (3, 9)

5.) E (-7, -1)

6.) F (-4, 0)

