Pre-Algebra Chapter 1 Pre-Test

Write a variable expression for each word phrase.

1.) The product of a number and 4.

*

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

2.) The sum of k and 7.

+

$\boxed{k+7}$

3.) The difference between 12 and b.

4.) The quotient of f and 11.

5.) 3 less than g.

switch order

$\boxed{g - 3}$

6.) Two times the quantity 8 plus w.

( )

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

Simplify each expression.

1.) 3 × 2 + 16 ÷ 4 - 3

2.) 8 + 24 ÷ 4 × 10 - 2

$8 + 6 * 10 - 2$

$8 + 60 - 2$

$68 - 2 = \boxed{66}$

3.) 12 - 3(8 + 2)

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

$*$

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

P
E
MD
AS

$24 \div 4 * 2$

$24 * \frac{1}{4} * 2$

4.) 68 - 12 ÷ 2 ÷ 3

Evaluate the expression.

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

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

$8(3) + 2(3)$

$24 + 6 = \boxed{30}$

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

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

$def = d * e * f$

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

$36 + 6(2)$

$36 + 12 = \boxed{48}$

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

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

1.) -6 __>__ -7 $\quad -2 > -1{,}000{,}000{,}000$

left

2.) -3 _____ |-8|

> Greater than

< less than

3.) |-12| _____ |-5|

12 > 5

4.) 2 _____ -|-9|

Find each sum or difference of each. NO CALCULATOR!!

1.) -8 + (-5) = $\boxed{-13}$

Same → sum

8 + 5 = -13

2.) 9 + 3

3.) -6 + 8 $\boxed{+2}$ $\boxed{2}$

Different → diffrence

8 − 6 = +2

4.) 4 + (-11)

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

8 + (-12) =

12 − 8 = -4

2.) -9 - 4

3.) 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.

+5

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

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Find each. NO CALCULATOR!!

1.) 8 × -5 $\boxed{-40}$

2.) 7 × 3

3.) -9 × 4

4.) -8 × -2 $\boxed{+16}$ $\boxed{16}$

5.) -56 ÷ -7 = $\boxed{+8}$ $\boxed{8}$

6.) 84 ÷ -12

7.) 24 ÷ 6

8.) -45 ÷ 15 = $\boxed{-3}$

Label each quadrant. Next, plot the points below.

I, II, III, IV

1.) A (6, -4)
2.) B (-7, 2)
3.) C (0, 8)
4.) D (3, 9)
5.) E (-7, -1)
6.) F (-4, 0)