Day 1 Homework

Name Key

What do you remember from Algebra 1?

Please answer every question to the best of your ability and show ALL of your work!

1) Simplify the Expression.

$3+4(5-7)^2$

$3+4(-2)^2$

$3+4(4)$

$3+16=19$

1) 19

2) Find slope given two points.

$(-5,2)\ (-4,-7)$

$m=\frac{-7-2}{-4--5}=\frac{-9}{1}$

2) -9

3) Identify the slope and y-intercept.

$y=-\frac{2}{3}x-5$

$y=mx+b$

$m=-2/3$

$y\text{int}: (0,-5)$

$m=-2/3$

3) yint: (0, -5)

4) Solve for x.

$5x+2=-3$

$\frac{5x}{5}=\frac{-5}{5}$

$x=-1$

4) x = -1

5) Solve for x.

2. $\frac{3(x-2)+4}{2}=5$ ·2

$3(x-2)+4=10$

$3x-6=6$

$3x=12$

$x=4$

5) x = 4

6) Simplify the radical completely.

$\sqrt{72}$

9 8

3 3 4 2

2 2

$6\sqrt{2}$

6) $6\sqrt{2}$

7) Factor the Quadratic Expression.

x^2-x-42

7 6

$(x-7)(x+6)$

7) (x-7)(x+6)

8) Solve the Quadratic Equation.

$4x^2-4x-15=0$

$(2x-5)(2x+3)=0$

$2x-5=0$ $\quad 2x+3=0$

$x=5/2$ $\quad x=-3/2$

8) x = 5/2, x = -3/2

Flip Over ☺

9) Solve the System of Linear Equations.

$y = 4x + 3$

$y = 2x - 1$

$4x+3=2x-1$

$2x=-4$

$x=-2$

$y=4(-2)+3$

$=-8+3$

$y=-5$

10) Solve the System of Linear Equations.

$2x + 5y = 16$

$3x + 2y = 13$

$-3(2x+5y=16) \rightarrow -6x-15y=-48$

$2(3x+2y=13) \rightarrow 6x+4y=26$

$-11y=-22$

$y=2$

$3x+2(2)=13$

$3x+4=13$

$3x=9$

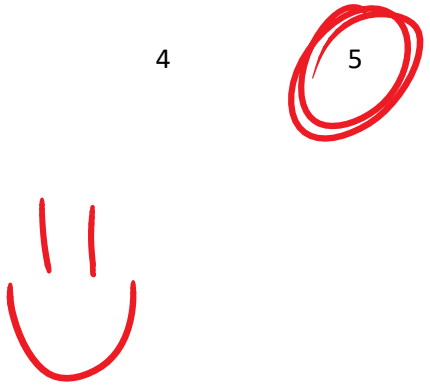
$x=3$

9) (-2, -5)

10) (3, 2)

11. On a scale of 1 to 5, rate your understanding of this material. Then please write <u>at least two sentences</u> explaining the rate you gave yourself.

1 2 3 4 5



12. If you finish before the time is up, please go back and check your answers to each question. Then, draw a picture below of something that makes you happy!