Warm-up 5/2

Solve the following system of equations using substitution, graphing, or elimination.

1. $2x - 2y = 12$

    $1x + 1y = 6$

2. $2x + 3y = 31$

    $x = -10$

3. Javier's construction company has been growing. He has discovered that his company has been growing by 2 workers per month. Javier started with 3 workers. Create a function to model the growth of workers in Javier's company. How many workers will he have after 1 year?

Warm-up 5/2

Solve the following system of equations using substitution, graphing, or elimination.

1. $2x - 2y = 12$

$2(1x + 1y = 6)$

$6 + y = 6$
$\underline{-6 \quad\quad -6}$
$y = 0$

$2x + 2y = 12$

$2x - 2y = 12$

$\dfrac{4x}{4} = \dfrac{24}{4}$

$(6, 0)$

$x = 6$

2. $2x + 3y = 31$

$x = -10$

$(-10, 17)$

$2(-10) + 3y = 31$

$-20 + 3y = 31$
$\underline{+20 \quad\quad\quad +20}$

$\dfrac{3y}{3} = \dfrac{51}{3}$

$y = 17$

3. Javier's construction company has been growing. He has discovered that his company has been growing by 2 workers per month. Javier started with 3 workers. Create a function to model the growth of workers in Javier's company. How many workers will he have after 1 year?

1 year = 12 months

$y = 2x + 3$

x - month
y - # of workers

$y = 12(2) + 3$

$y = 24 + 3$

$y = 27$

27 workers

$$y = 0.16x - 0.30$$

$$y = 0.16(10.5) - 0.3$$

$$y = 1.38$$

$$\$1.38$$

$x - \$ \text{ meal}$

$y - \text{tip}$

$$y = 6.09x + 63.93$$

$$x = 6 \qquad y = 6.09(6) + 63.93$$

$$y = 100.47$$

$$100\%$$

$$y = 0.42x - 19.81$$

$$y = 10.5$$

$$10.5 = 0.42x - 19.81$$
$$+19.81 \qquad\qquad +19.81$$
$$\overline{\qquad\qquad\qquad\qquad\qquad}$$
$$\frac{30.31}{0.42} = \frac{0.42x}{0.42}$$

$$x = 72.2\text{ in}$$

$$i = \sqrt{-1}$$
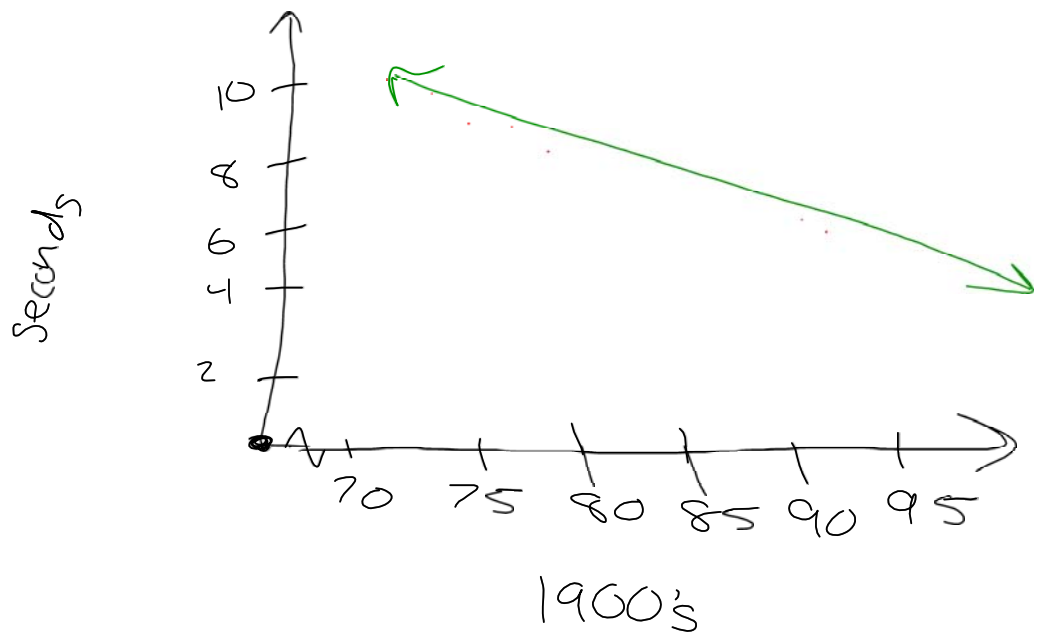
Complex solutions

$$\frac{1 \pm \sqrt{4}\, i}{3} \qquad\qquad \frac{1 \pm \sqrt{-4}}{3}$$

Correlation Coefficient

Choose your lowest score in the following categories (1-3) and do a practice from it.

1. Interpreting Functions (22%)

2. Reasoning with Equations and Inequalities (20%)

3. Linear, Quadratic, and Exponential (15%)

Choose your 2nd lowest from categories 1-5 and do a practice from it.

4. Structure and Expressions (11%)

5. Creating Equations (11%)