

Name: _____ SOLUTION _____

Econ 520 (Spring 2012): Quiz 2

1. (4 points) Consider a straight line that includes the points (2, 8) and (5, 2). Calculate the following.

- (a) Slope of this line - 2
- (b) x -intercept 6
- (c) y -intercept 12
- (d) Equation of this line $y = -2x + 12$

2. (4 points) Consider the relationship: $y = \frac{1}{(x-10)^2} - 5$ Write x as a function of y .

$$x = \frac{1}{\sqrt{y+5}} + 10$$

3. (4 points) Solve the following two equations in two unknowns: $\frac{2y}{x} = \frac{1}{2}$ and $x + y = 15$

$$x = 12; y = 3$$

4. (4 points) Write $2^{1000} \times 2^{51} \times 2^{1000^{1000}}$ as a simplified power of 2.

$$2^{1,001,051}$$

5. (4 points) Write the following as a single fraction. $\frac{a}{b} + \frac{c}{d}$

$$\frac{ad + bc}{bd}$$