

Coordinate Algebra
Review Worksheet for Unit 2 Quiz #1

Name _____ Class Period _____

You must know the following Properties of Equality and Properties of Operations and write an example of each according to the note handout:

- Addition Property of Equality
- Subtraction Property of Equality
- Multiplication Property of Equality
- Division Property of Equality
- Substitution Property of Equality
- Reflexive Property of Equality
- Symmetric Property of Equality
- Transitive Property of Equality
- Commutative Property of Addition
- Commutative Property of Multiplication
- Associative Property of Addition
- Associative Property of Multiplication
- Distributive Property
- Identity Property of Addition
- Identity Property of Multiplication
- Property of Zero
- Additive and Multiplicative Inverses

1. Solve and state the reasons for the steps

$$2(x + 4) - 5 = 5$$

Given

2. Solve for x:

a) $\frac{2}{3}x - 7 = -1$

b) $-3x + 2 > 8$

3. Claire needs \$3.35 to buy a Frappuccino. The only money she has is nickels and quarters. Write an equation for the different amounts of nickels, n , and quarters, q , she could use to buy the drink.

4. If she has 12 quarters, how many nickels does she need to buy the drink?

5. Coach Barton holds hitting lessons for \$40 a session for a 30 minute session. Write an equation for the amount of money he makes, C , for s , sessions.

A. How much money will he make in 5 hours?

B. How many hours will he have to coach to make \$400?

6. Solve for x.

a) $3^x + 1 = 28$

b) $5^{2x} = 25^{x+2}$

c) $2(4^x) - 3 = 29$

d) $5(10^{3x-1}) = 500000$