

Name: \_\_\_\_\_

QUIZ 1  
August 28, 2001

**Calculator are not allowed!**

1.(Multiple choice — circle your answer clearly.) The equations

$$5x - 2y = 8$$

$$10x - 4y = 10$$

represent lines that are

- (A) perpendicular
- (B) parallel (but not identical)
- (C) identical
- (D) none of the above

2. Solve the following system of equations

$$3x + 2y = 2$$

$$x - 2y = 1.$$

## Solutions to Quiz #1

1. Put each equation in  $y = mx + b$  form:

$$y = (5/2)x - 4$$

$$y = (5/2)x - (5/2).$$

Both lines thus have the same slope, so they are parallel. They have different  $y$ -intercepts, so they are not identical. Answer: B.

2. Add the two equations to get  $4x = 3$ ; so  $x = (3/4)$ . Now substitute into either one to get  $y = -1/8$ .