

Geometry

Algebra Review Week 10

SHOW ALL WORK!!!

Name _____ Per _____

Semester 1

Multiply:

1. $(2x^2 - 3)(7x^2 + 3x - 2)$

Factor:

2. $(2x^2 + x - 15)$

Simplify:

3. $\frac{x-10}{3x-15} \cdot \frac{8x-40}{x^2-9x-10}$

4. $\frac{2b^2-4b-30}{b-5} \div \frac{2}{4b+10}$

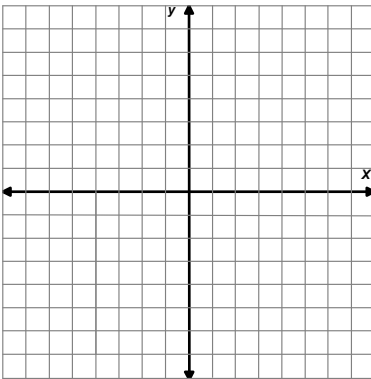
5. Solve the system of inequalities by graphing

$$3x + 2y > -2$$

$$x - 2y \geq 6$$

6. Solve using the quadratic formula.

$$5x^2 + 4x = 7$$



7. Solve for x:

$$7x - (4 + 3x) = 6(x - 5) + 2$$

8. Solve. Write answer as an ordered pair.

$$2x + 3y = 85$$

$$x - 24y = 34$$

Multiply:

9. $(2x^2 + 5)(3x^2 + 3x - 2)$

Factor:

10. $(2x^2 - 3x - 35)$

Simplify:

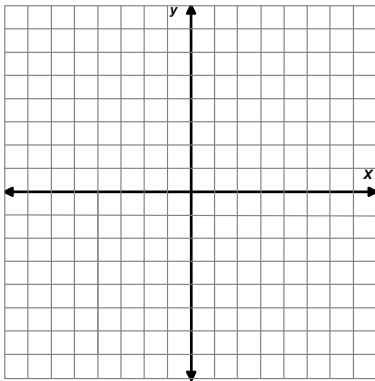
11. $\frac{x-5}{4x+20} \cdot \frac{4x+8}{x^2-25}$

12. $\frac{4b^2-8b-12}{b-5} \div \frac{b^2+3b+2}{2b-10}$

13. Solve the system of inequalities by graphing

$$3x + 2y > -6$$

$$x - 2y \geq 4$$



14. Solve using the zero product property.

$$2x^2 + 3x = 9$$

15. Solve for x:

$$4(x - 25) + 22 = 7(x - 27)$$

16. Solve. Write answer as an ordered pair.

$$x - 5y = 80$$

$$3x + 15y = 90$$