1. Write in radical notation and simplify if possible.

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2. Assume all variables are positive real numbers. Write the following radicands with rational exponents and simplify if possible.



3. Solve for x

(x + 2)(x - 2) = 15 + (x +1)(x - 7)

Check your solution by substituting your solution in the original equation.

4. Solve for x



Cancel x-5.

4x=20

4(5)=20 , x=5

5. Compute the slope of the line determined by the given equations.

5x + 4y = 1

6. Compute the slope of the line determined by the given points. Use ∆ y and ∆ x notation.

(12, 8), (0, 16)

7. Graph the following using the x and y-intercepts.

8x + 10y = 12

8. Find the equation of the following lines. Write your answer in slope-intercept form.

Through (-1, 5) with m = -1

9. Find the area bounded by the following. y = |x| and y = 4

10. Let h(x) = x2-1.

Evaluate (b) h(-2)

11. Solve each system using either the elimination method or the substitution method. Verify your

result by graphing each system. Indicate the point of intersection on your graph.

2x + y = 7

-2x + 3y = 5

12. Two people set out simultaneously from two locations 12 miles apart and walk toward each other. One person walks 5 miles an hour faster than the other. Find the rate of speed of each person if they meet in one hour and ten minutes.