

HW 23 Chapter 1A review

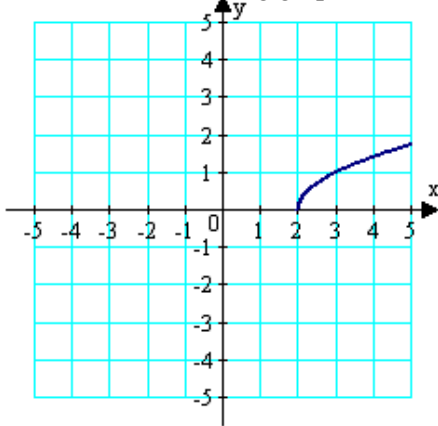
1. Algebraically find the x and y intercepts of

a. $y = 4x - 7$

b. $y = x^2 - 5x - 14$

c. $4x - 9y = 22$

2. Given the following graph. Sketch the following types of symmetry in different colors:



a. x-axis

b. y-axis

c. origin

3. Find the equation of the circles described below. Accurately graph them.

a. center at (4,-2) and radius of 4

b. center at (-3,2) and goes through the point (5,1)

4. Solve the following equations for x.

a. $4(x+3) - 2x = 5(x-2)$

b. $3(2x-1) = 4(x+6) + 2x$

c. $\sqrt{2x+4} = 7$

d. $\frac{4}{(x-10)(x-4)} = \frac{1}{(x-10)} + \frac{10}{(x-4)}$

e. $\frac{1}{x-3} + \frac{1}{x+3} = \frac{10}{x^2-9}$

5. **Dimensions of a Sports Court:** The length of a sports court is 1.5 times as wide as it is long, and the perimeter is 90 feet.

a. Write w in terms of l and write an equation for the perimeter in terms of l .

b. Find the dimensions of the sport court.

6. **Grades:** In your math class you have 7 tests per semester, each one is worth 100 points. You have taken 6 of the tests and have scored 88, 76, 91, 83, 85 and 93. You would like to have an average of 87% in the test category. What must you earn on the final test to have this average?

7 Solve the following equations

a. $x^2 + 6x - 27 = 0$

b. $x^2 + 9x + 14 = 0$

c. $6x^2 + x - 15 = 0$

8. Test the following equations for symmetry with the x -axis, y -axis and origin.

a. $y = 3x^2 - 4$

b. $2xy = 13$

c. $x^2 + 3y^2 = 13$