

Name - _____

Start time - ___ : ___

End time - ___ : ___

Solve the following.

1. Evaluate for the given values of a and b.

$$a^2 + b^2, \text{ for } a = 2 \text{ and } b = 2$$

$$|2a - 3b|, \text{ for } a = -3 \text{ and } b = 5$$

$$3a^3 - 4b^4, \text{ for } a = -1 \text{ and } b = -2$$

2. Solve-

a. $x + 3 < 0$

b. $x + 1 > -x + 5$

c. $2(x - 2) < -(x + 7)$

3. For what value of the constant **k** does the quadratic equation $x^2 + 2x = -2k$ have two distinct real solutions?4. For what value of the constant **b** does the linear equation $2x + by = 2$ have a slope equal to 2?5. What is the y intercept of the line $-4x + 6y = -12$?6. What is the x intercept of the line $-3x + y = 3$?7. What is point of intersection of the lines $x - y = 3$ and $-5x - 2y = -22$?8. What is the slope of the line with equation $y - 4 = 10$?

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