

ALGEBRA 1 REVIEW

Name: _____

Please complete without calculator. SHOW WORK. A list of answers will not be accepted.

SOLVING FOR "X"

1. $2x - 5 + 3x - 10 = 90$

4. $3x - 40 + 7x + 15 = 180$

2. $2(x - 2) = 3(2x - 3)$

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

3. $\frac{2x+3}{3} = \frac{x+1}{2}$

6. $\frac{3}{x-1} = \frac{5}{x}$

SOLVING BY FACTORING

7. $x^2 - 5x - 14 = 0$

9. $2x^2 - 5x - 3 = 0$

8. $x^2 - 2x = 24$

10. $2x^2 + 7x + 5 = 0$

LINEAR EQUATIONS

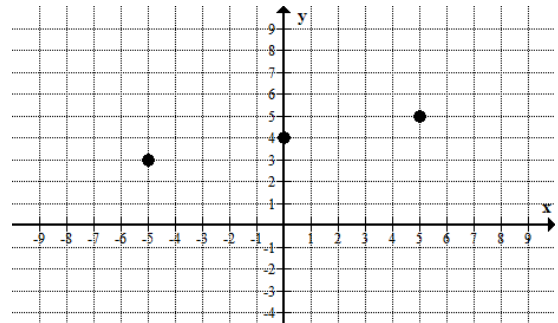
Write the equation of the line through the given points.

11. $(0,10)$ and $(-3,4)$

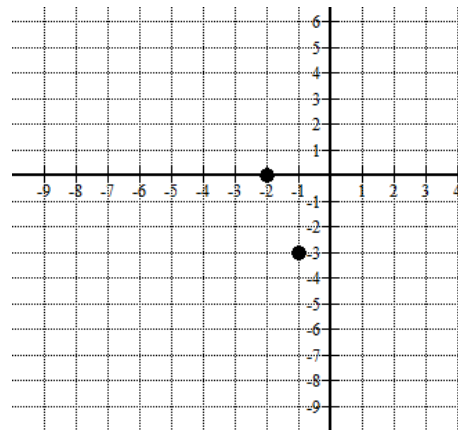
12. $(3,2)$ and $(6,2)$

13. Find the slope of the line. $2x - 3y = 9$

14. Write a linear equation through the points $(-5,3)$, $(0,4)$, and $(5,5)$.



15. Write a linear equation through the points $(-2, 0)$ and $(-1, -3)$.



ORDER OF OPERATIONS

Simplify the following expressions and write an equivalent expression.

16. $(3x - 4y)^2$

21. $(x + 3)(x - 4) + 2(x - 4)$

17. $5x - 2(4x - 1)$

22. $(2x - 1)(x - 3)$

18. $(x + 2)^2 - 2(x - 1)$

23. $(2x - 1)(x - 3) + 2x - 6$

19. $3x - 4x(x + 6) + 11$

24. $x(3x - 2) - 7(x + 4)$

20. $5x - (4x + 5)(2x - 3)$

