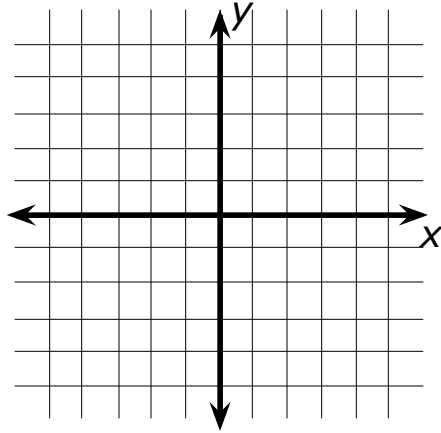


Elementary Algebra Placement Test

1. Graph $3x - 2y = -6$.

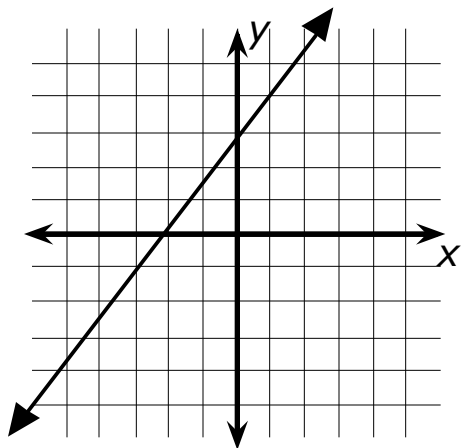


2. Find the common solution: $3x - 2y = 8$
 $4x + y = 7$
3. Find the common solution: $y = -2x$
 $5x + 2y = 2$
4. Multiply $(2x - 3)(5x + 2)$
5. Multiply $(x - 2)(2x^2 - 3x + 4)$
6. Add $\frac{x-2}{x+3} + \frac{3x-5}{x-3}$
7. Factor: $x^2 - x - 12$
8. Factor: $2x^2 - x - 3$
9. Simplify: $\frac{x-4}{x^2-6x+8}$
10. Add: $\frac{x+3}{x^2-x-2} + \frac{x-1}{x^2-3x-4}$
11. Solve: $\frac{5}{6}x - \frac{3}{4} = \frac{-2}{3}$
12. Solve: $\frac{3}{5x} + \frac{7}{15} = \frac{9}{10}$
13. Find the Truth Set: $\frac{4}{x-6} + 3 = \frac{1}{x-6}$
14. Find the Truth Set: $x^2 - 25 = 0$
15. Find the Truth Set: $2x^2 + x - 6 = 0$

16. Simplify: $3\sqrt{75}$
17. Simplify: $3\sqrt{27} + 2\sqrt{12}$
18. Solve: $x^2 = 17$
19. Solve: $(x + 3)^2 = 13$
20. The sum of two numbers is 7. The second number subtracted from 3 times the first number is 1. What are the numbers?

Elem. Algebra Placement Test Answers

1.



2. (2, -1)

3. (2, -4)

4. $10^2 - 11x - 6$

5. $2x^3 - 7x^2 + 10x - 8$

6. $\frac{4x^2 - x - 9}{x^2 - 9}$

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

8. $(2x - 3)(x + 1)$

9. $\frac{1}{x - 2}$

10. $\frac{2x^2 - 4x - 10}{(x - 2)(x + 1)(x - 4)}$

11. $\frac{1}{10}$

12. $\frac{18}{13}$

13. {5}

14. {5, -5}

15. $\{\frac{3}{2}, -2\}$

16. $15\sqrt{3}$

17. $13\sqrt{3}$

18. $\{ \sqrt{17}, -\sqrt{17} \}$

19. $\{-3 + \sqrt{13}, -3 - \sqrt{13}\}$

20. 2 and 5