



Name _____ Class _____ No _____



Finding the Roots of Quadratic Equations ($a > 1$) by Factorization



Find the roots of each quadratic equation.

1.) $5x^2 - 3x - 2 = 0$

a. $x = 2, x = -\frac{1}{5}$ b. $x = 1, x = -\frac{2}{5}$ c. $x = -1, x = -\frac{2}{3}$ d. $x = -\frac{1}{2}, x = \frac{2}{5}$

2.) $4x^2 + 13x + 3 = 0$

a. $x = 1, x = -\frac{1}{2}$ b. $x = -3, x = -\frac{3}{5}$ c. $x = 2, x = \frac{1}{4}$ d. $x = -3, x = -\frac{1}{4}$

3.) $3x^2 - 11x + 6 = 0$

a. $x = 3, x = \frac{2}{3}$ b. $x = 5, x = -\frac{1}{2}$ c. $x = 2, x = -\frac{1}{6}$ d. $x = 2, x = \frac{1}{3}$

4.) $5x^2 - 22x + 21 = 0$

a. $x = 2, x = -\frac{5}{6}$ b. $x = 1, x = -\frac{3}{5}$ c. $x = 3, x = \frac{7}{5}$ d. $x = 7, x = -\frac{1}{5}$

5.) $5x^2 - 7x - 6 = 0$

a. $x = 3, x = -\frac{2}{5}$ b. $x = 2, x = -\frac{3}{5}$ c. $x = 3, x = -\frac{1}{5}$ d. $x = 1, x = \frac{3}{5}$

6.) $6x^2 - 7x - 3 = 0$

a. $x = 1, x = \frac{2}{3}$ b. $x = 2, x = -\frac{3}{5}$ c. $x = 3, x = \frac{1}{3}$ d. $x = \frac{3}{2}, x = -\frac{1}{3}$

7.) $8x^2 - 2x - 15 = 0$

a. $x = -\frac{3}{2}, x = -\frac{1}{3}$ b. $x = -\frac{3}{2}, x = -\frac{3}{4}$ c. $x = \frac{3}{2}, x = -\frac{5}{4}$ d. $x = -\frac{1}{2}, x = -\frac{1}{4}$

8.) $15x^2 + 26x + 8 = 0$

a. $x = -\frac{2}{5}, x = -\frac{4}{3}$ b. $x = -\frac{3}{5}, x = -\frac{1}{3}$ c. $x = -\frac{1}{5}, x = -\frac{2}{3}$ d. $x = -\frac{4}{5}, x = -\frac{5}{3}$

9.) $8x^2 + 18y + 9 = 0$

a. $x = \frac{2}{5}, x = -\frac{1}{6}$

b. $x = -\frac{3}{4}, x = -\frac{3}{2}$

c. $x = \frac{1}{2}, x = -\frac{2}{5}$

d. $x = \frac{3}{2}, x = \frac{1}{3}$

10.) $9x^2 - 21x + 10 = 0$

a. $x = \frac{1}{2}, x = -\frac{2}{3}$

b. $x = \frac{2}{3}, x = \frac{1}{3}$

c. $x = \frac{3}{2}, x = -\frac{1}{3}$

d. $x = \frac{5}{3}, x = \frac{2}{3}$