College Prep Algebra
Quiz 1.1-1.3

Name_____

Solve.

1. $4x + 11 = -41$

A. $-\frac{15}{2}$
B. $\frac{15}{2}$
C. 13
D. -13

2. $8 + 3(3x - 2) = 4(6 - 2x)$

A. $\frac{22}{17}$
B. $\frac{26}{17}$
C. $\frac{12}{17}$
D. $\frac{16}{17}$

3. $\frac{1}{2}x + \frac{3}{4} = \frac{4}{3}x - \frac{5}{6}$

A. $\frac{17}{10}$
B. $\frac{13}{10}$
C. $\frac{19}{10}$
D. $\frac{21}{10}$

4. $|4x + 8| = 12$

A. 8,4
B. $-8,4$
C. $8, -4$
D. $\emptyset$

5. $2\left|\frac{3x+5}{4}\right| - 15 = 13$

A. $-2, -\frac{4}{3}$
B. $17, -\frac{61}{3}$
C. $\frac{51}{3}, \frac{61}{3}$
D. $\emptyset$

6. $3|4x + 11| + 17 = 8$

A. $-\frac{7}{2}, -2$
B. $\frac{9}{2}, -3$
C. $-\frac{11}{2}, 5$
D. $\emptyset$

Solve the quadratic equation by factoring.

7. $x^2 - 10x = 24$

A. $12, -2$
B. $-2,12$
C. $4, -6$
D. $-4,6$

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

A. $-\frac{3}{2}, 5$
B. $\frac{3}{2}, -5$
C. $-\frac{5}{2}, -3$
D. *prime*

Solve the quadratic equation by square roots.

9. $5x^2 - 80 = 0$

A. ± 80
B. ± 4
C. ± 8
D. $\pm\sqrt{80}$

10. $(x+2)^2 + 28 = 0$

A. $-3 \pm 3i\sqrt{9}$
B. $-3 \pm 9i\sqrt{3}$
C. $-3 \pm 3i\sqrt{3}$
D. $-3 \pm i\sqrt{27}$

Solve the quadratic equation by using the quadratic formula.

11. $4x^2 - 13 = 6x$

A. $\frac{6\pm\sqrt{221}}{8}$
B. $\frac{3\pm\sqrt{61}}{4}$
C. $-\frac{3}{8}, \frac{5}{8}$
D. $\frac{7}{8}, -\frac{1}{8}$

12. $x^2 - 5x + 10 = 0$

A. $\frac{5\pm\sqrt{-15}}{2}$
B. $\frac{5\pm i\sqrt{15}}{2}$
C. $\frac{5\pm 2i\sqrt{15}}{4}$
D. $\frac{5\pm 5i\sqrt{3}}{4}$

Solve the quadratic equation by using any method you choose.

13. $x^2 - 18x + 81 = 0$

A. 9
B. $9, -9$
C. -9
D. *prime*

14. $2x^2 = -2x - 3$

A. $\frac{2\pm 24i}{4}$
B. $\frac{-1\pm 8i}{4}$
C. $\frac{2\pm 4i\sqrt{6}}{4}$
D. $\frac{-1\pm i\sqrt{5}}{2}$

15. $3x^2 + 13x = 10$

A. $-\frac{2}{3}, 2$
B. $\frac{2}{3}, -2$
C. $\frac{3}{2}, -1$
D. $-\frac{3}{2}, 1$

16. $4(3x-1)^2 = 144$

A. $-\frac{1}{3}, \frac{4}{3}$
B. $\frac{1}{3}, -\frac{4}{3}$
C. $-\frac{5}{3}, \frac{7}{3}$
D. $\frac{5}{3}, -\frac{7}{3}$