

Classwork 7

Intermediate Algebra MTH 35
Topic: Solving Equations



Name: _____

Solve the following equations.

1. $3\sqrt{x} + 2 = 0$

ANSWER _____

2. $4\sqrt[3]{x} - 8 = 0$

ANSWER _____

3. $\sqrt{x} - x^2 = 0$

ANSWER _____

4. $\sqrt{x} - \sqrt[3]{x} = 0$

ANSWER _____

5. $\frac{9x^{7/2}}{2} - 16x = 0$

ANSWER _____

6. $2 - \frac{30}{x} = 0$

ANSWER _____

7. $3x - \frac{2}{x} = 0$

ANSWER _____

8. $2x^2 - \frac{5}{x^2} = 0$

ANSWER _____

9. $1 - \frac{x}{x^2 - 6} = 0$

ANSWER _____

10. $x + 1 - \frac{1}{x - 1} = 0$

ANSWER _____

Answers

1. $x = 4/9$
2. $x = 8$
3. $x = 0, 1$, factor out \sqrt{x} .
4. $x = 0, 1$, factor out \sqrt{x} .
5. $x = 0, (32/9)^{2/5}$, factor out x .
6. $x = 15$
7. $x = \sqrt{2/3}, -\sqrt{2/3}$
8. $x = \sqrt[4]{5/2}, -\sqrt[4]{5/2}$
9. $x = 3, -2$
10. $x = \sqrt{2}, -\sqrt{2}$