

The learning targets below are assessed on the *Equations and Inequalities* unit test. The problems below each statement represent the type of questions you are expected to solve to demonstrate mastery of each target.

I can solve linear equations and inequalities.

- $\frac{x}{2} = \frac{3x}{4} + 5$
- $1 - \frac{a}{2} > 4$

I can solve equations and inequalities involving absolute value.

- $4|2y - 7| + 5 = 7$
- $5 - |3x - 2| \geq 0$
- $\frac{5}{2}|c + 2| + 6 < 3$

I can solve quadratic equations and inequalities.

- $m^2 - 2m - 5 = 0$
- $z^2 - 4z \geq 0$

I can solve radical equations and equations involving rational exponents.

- $\sqrt{r+5} - \sqrt{r-3} = 2$
- $(x^2 - x - 4)^{3/4} - 2 = 6$

I can solve polynomial equations and inequalities.

- $x^4 + x^3 = 5x^2 + 3x - 6$
- $b^3 - 3b^2 + 4 > 0$
- $u^3 + 4u^2 \leq u + 4$

I can solve rational equations and inequalities.

- $\frac{p-5}{p} = \frac{p}{p+4} - \frac{3}{4}$
- $\frac{k+2}{k-5} \leq 6$

I can solve exponential equations.

- $3^{4-t} = 2$
- $5 - e^{2w} = 9$
- $(1/9)^{3x-2} = 27^{1-x}$

I can solve logarithmic equations.

- $5 - \ln r = 7$
- $\log_5(v^2) = \log_5(v + 12)$
- $\frac{1}{2}\log(x+3) = 1$