## NAME

## Module 6 Solving Absolute Value Equations and Inequalities

## Lesson 2 Solving Advanced Absolute Value Equations

## $\overline{\text { DATE }}$

## Lesson Objectives

- Solve absolute value equations in which the absolute value expression is isolated in one step.
- Solve absolute value equations in which the absolute value expression is isolated in two steps.

The solutions to the equation $|x|=a$ are $x=$ $\qquad$ and
$x=$ $\qquad$ , if $a$ is nonnegative.

To rewrite an absolute value equation as a disjunction, we need to
$\qquad$ the absolute value expression.
(1) Solve:
$2=|n|+3$

Solution Set: $\qquad$
Solve:
$4+|n-5|=4$

Solution Set: $\qquad$
(2) Solve:
$-3|a|=12$

Solution Set: $\qquad$
(4) Solve:
$2|x+7|+2=4$

Solution Set: $\qquad$

