

# Answer Key

## Lesson 13

### Graphing Linear Inequalities

To graph a linear inequality, start by finding the slope, y-intercept, and plot the points for the line. Then, use the following rules for the type of line, the shading, and complete your graph.

Inequality	Type of Line
$< \text{ or } >$	dotted
$\leq \text{ or } \geq$	solid

Inequality	Shading
$< \text{ or } \leq$	Below the line
$> \text{ or } \geq$	Above the line

1. Plot y-intercept
2. Apply slope to y-intercept
3. Connect with a solid or dashed line
4. Shade above or below.

Example: Graph each of the following inequalities.

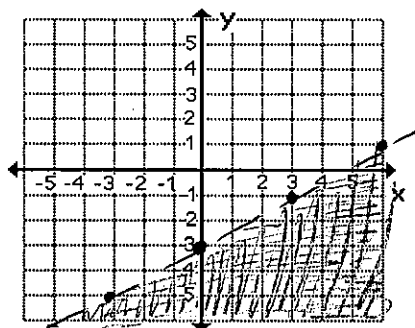
1.  $y < \frac{2}{3}x - 3$

Slope (m):  $\frac{2}{3}$

y-intercept:  $-3$

type of line: *dashed*

shading: *Below*



2.  $y \geq -3x$

Slope (m):  $-3$

y-intercept:  $0$

type of line: *Solid*

shading: *Above*

