**2-54.** Graph the line *y* = **on graph paper.

1. Draw a slope triangle.
2. Rotate your slope triangle 90° around the origin to get a new slope triangle. What is the new slope?
3. Find the equation of a line perpendicular to *y* = **.

 **2-63.** **Examine** the triangle below.



1. If *mD* = 48° and *mF* = 117°, then what is *mE*?
2. Solve for *x* if *mD* = 4*x* + 2°, *mF* = 7*x* − 8°, and *mE* = 4*x* + 6°. Then find *mD*.
3. If *mD* = *mF* = *mE*, what type of triangle is Δ*FED*?

 **2-64.** Plot Δ*ABC* on graph paper if *A* (6, 3), *B* (2, 1), and *C* (5, 7).

1. Δ*ABC* is rotated about the origin 180° to become Δ*A′B′C*′. Name the coordinates of *A*′, *B*′, and *C*′.
2. This time Δ*ABC* is rotated 180° about point *C* to form Δ*A″B″C*″. Name the coordinates of *B*″.
3. If Δ*ABC* is rotated 90° clockwise () about the origin to form Δ*A′″B′″C′″*, what are the coordinates of point *A*′″?

 **2-65.** **Examine** the graph below.



1. Find the equation of the line.
2. Is the line *y* = **+ 1 perpendicular to this line? How do you know?