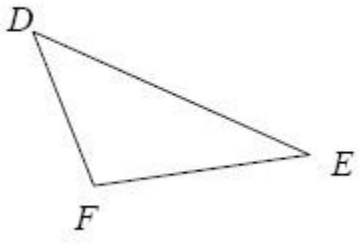
2-54. Graph the line $y = \frac{3}{4}x$ on graph paper.

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 $y = \frac{4}{3}x$.

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

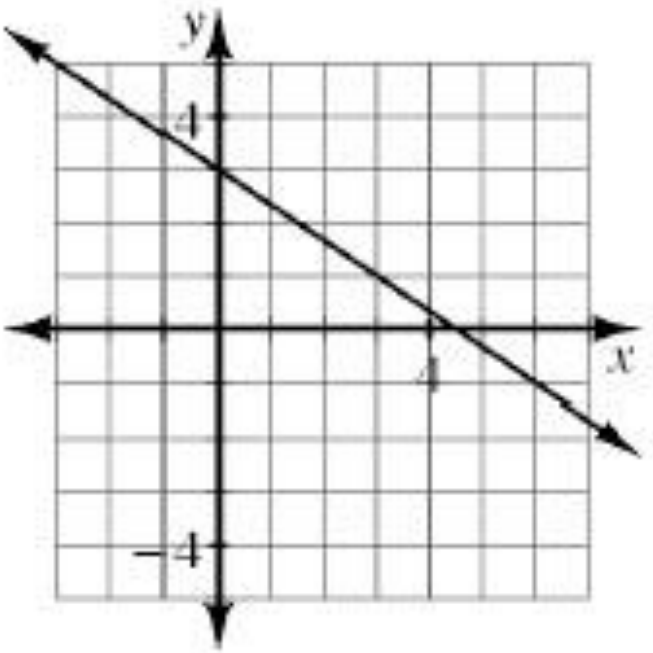


1. If $m\angle D = 48°$ and $m\angle F = 117°$, then what is $m\angle E$?
2. Solve for x if $m\angle D = 4x + 2°$, $m\angle F = 7x - 8°$, and $m\angle E = 4x + 6°$. Then find $m\angle D$.
3. If $m\angle D = m\angle F = m\angle E$, what type of triangle is ΔFED?

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

1. ΔABC is rotated about the origin 180° to become $\Delta A'B'C'$. Name the coordinates of A', B', and C'.
2. This time ΔABC is rotated 180° about point C to form $\Delta A''B''C''$. Name the coordinates of B''.
3. If ΔABC is rotated 90° clockwise (↻) about the origin to form $\Delta A'''B'''C'''$, what are the coordinates of point A'''?

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



1. Find the equation of the line.

2. Is the line $y = \frac{3}{2}x + 1$ perpendicular to this line? How do you know?