Course: Geometry
Unit: Lines and the Coordinate Plane
Section: Graphing the Equation of a Line

Example: Graphing Lines Using Intercepts

Problem:

Consider the equation four x minus three y equals twelve.

Solution:

We start by finding the x-intercept.
Four x minus three y equals twelve.
Plug in zero for y.
Four x equals twelve.
x equals three.
This means that 3 is the x-intercept, so we plot it on the graph.

Next, find the y-intercept.
Four x minus three y equals twelve.
Plug in zero for x.
Negative three y equals twelve.
y equals negative four.
The y-intercept is negative four, so we plot this point on the graph.

Finally, connect the points with a straightedge.