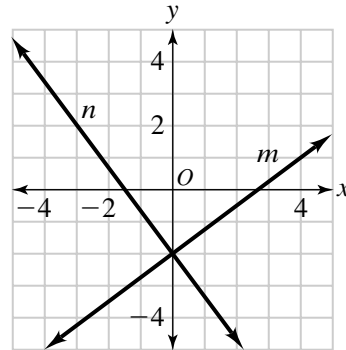


Enrichment 10-3

Finding the Slope of a Line

Patterns in Algebra

The lines on the graph intersect at one point.



- Find the slope of line m .
- Find the slope of line n .

- Multiply the slope of line m by the slope of line n .

- What do you notice about the slopes of lines m and n ?

- Are lines m and n parallel or perpendicular?

The equation of line g is $y = 2x + 1$. The equation for line h is $y = -\frac{1}{2}x + 1$.

- Find the slope of line g .
- Find the slope of line h .

- Multiply the slope of line g by the slope of line h .

- What do you notice about the slopes of lines g and h ?

- Are lines g and h parallel or perpendicular?

- Write a “rule” for determining how you know when two lines are perpendicular.

Write an equation for a line perpendicular to the given equation.

12. $y = -3x + 1$

13. $y = \frac{3}{5}x - 10$

14. $y = -\frac{1}{7}x + 4$
