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ALGEBRA 1 · 5 MINUTES · START RIGHT AWAY

Lesson 2-4b

Understand the Slopes of Perpendicular Lines

Name _____ Date _____ Per _____

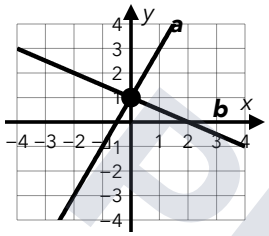
1 FLUENCY

Complete the table with the slope of a line perpendicular to each line.

Slope of line	$\frac{2}{3}$	-5	1	$-\frac{1}{4}$
Perpendicular slope				

2 VISUAL MODEL

Lines *a* and *b* meet at a right angle. Find each slope and their product.



slope of *a* = ☐

slope of *b* = ☐

product = ☐

3 APPLICATION

A roof beam has slope $\frac{3}{4}$. A brace must meet the beam at a right angle. What is the slope of the brace? If the brace runs 6 ft to the right, how far does it drop?

slope: _____ drop: _____

WORK

4 REASONING

Sam says a line perpendicular to a line with slope 4 must have slope −4. Is he correct? Explain.

Yes or **No**

_____

_____

*We don't divide our effort, we **multiply** it!*

✎ Show your work ✓ Check your work ★ Try your best

Preview - the full worksheet and its answer key are at primeworksheet.com