Integrated Algebra Journal: Slope
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NAME:_____

P.I. A.A.33: Determine the slope of a line, given the coordinates of two points on the line

1. Does the line passing through (5, 6) and $(-3, 8)$ have a slope of $\frac{-3-5}{8-6}$? Explain.

2. Is the statement "A line with slope of -1 passes through the origin" true or false? Explain.

3. Find the slope of each line containing the origin and $\left(5, \frac{1}{n}\right)$ for n = 1, 2, 3, ..., 10. Graph your results in terms of ordered pairs (n, slope). Will the line ever be horizontal?

[1] No, the slope is the vertical change over the horizontal change and this ratio shows the horizontal change over the vertical change.

[2] False; for example, a line with slope -1 that passes through (0, 1) does not pass through the origin.

[3] No, the line will approach horizontal but will never have zero slope.