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Dilations and the equation of a line.

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Summary: Students engage in proportional reasoning when they use covariance and multiple comparisons. Without rich connections to proportional reasoning, students may develop inadequate understandings of linear relationships and the equations that model them. Teachers can improve students' understanding of linear relationships by focusing on realistic situations and directing students' attention toward the dependency of x and y and the covariant relationship expressed in linear equations. In this article, the author presents how to track students' understanding of proportional reasoning by combining transformational geometry, similar-triangle reasoning, and linear relationships. (ERIC)

Classification: I23

Keywords: equations; mathematical concepts; geometric concepts; linear functions

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