

TAKS Objective 3
TEK A.6G
Tutorial
(Grades 9, 10, and 11)

...relate direct variation to linear functions and solve problems involving proportional change.

“Varies directly” means the same as
“proportional”.

Therefore, if a problem states that y
varies directly as x , it means that y and x
are proportional.

This means that a proportion can be set
up.

If a problem is looking for a “constant of variation”, it can be found by simplifying the ratio y/x .

Example: y varies directly as x and y is 63 when x is 81. What is the constant of variation?

Reduce $63/81$.

Constant of variation: $7/9$

The constant of variation is known as slope.

If an equation is needed when variables vary directly, plug the constant of variation in for slope and let the y-intercept be 0.

Equation involving constant of variation: $y = mx + 0$