Verbal Descriptions to Direct-Variation Equations y = kx

Variable and Meaning Template

Two-column template for defining variables in words before writing y = kx.

Variable	Meaning
y	dependent quantity (in words)
x	independent quantity (in words)
k	constant ratio y/x (with units)

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Direct-Variation Translation Flowchart

Six-step flowchart: identify variables, write y = kx, substitute known values, solve for k, write final equation, answer follow-up.

Step	Action
1	Identify the two related quantities.
2	Assign y (dependent) and x (independent).
3	Write the general equation y = kx.
4	Substitute a known pair and solve for k.
5	Rewrite the equation with the numerical k.
6	Use the equation to answer the follow-up.