REVIEW: Independent and Dependent Variables

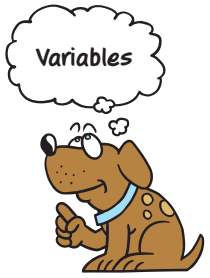
Name _____

Key Concept and Vocabulary

Independent variable is the input variable.

$y = 2x + 1$

Dependent variable is the output variable.



Visual Model

Independent Variable	Expression	Dependent Variable
x	$2x + 1$	y
1	$2(1) + 1$	3
2	$2(2) + 1$	5
3	$2(3) + 1$	7

Skill Examples

1. In $y = 3x - 2$, x is the independent variable and y is the dependent variable.
2. In $C = 2\pi r$, r is the independent variable and C is the dependent variable.
3. In $A = \ell w$, ℓ and w are the independent variables and A is the dependent variable.

Application Example

4. Your income i is calculated from the total time t worked. Identify the independent variable and the dependent variable.

   ∴ Total time t is the independent variable and your income i is the dependent variable.

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Identify the independent variable(s) and the dependent variable.

5. $y = 6x + 1$ _____
6. $A = \frac{1}{2}bh$ _____
7. $A = \pi r^2$ _____
8. $m = 15 - n$ _____
9. $V = \ell wh$ _____
10. $P = 2\ell + 2w$ _____

11.

Hours Studying, h	Test Score, s
2	72%
3	80%
5	91%
7	98%

_____

12.

Number of CDs, n	Total Cost, c
1	$9.99
2	$19.98
3	$29.97
4	$39.96

_____

13. **DISTANCE** To find the distance d traveled, you multiply the rate r by the time t. Identify the independent variables and the dependent variable.

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