

Lesson 9-1 • Apply Day

Reinforce Understanding

Tables of Values

I can recognize when two quantities change together, and identify which one is the independent variable and which is the dependent variable.

Worked model

A copier prints 35 pages each minute. Make a table of values for 1, 2, and 3 minutes.

1. Name the variables: minutes is independent (x); pages printed is dependent (y).
2. Column 1 holds x, the minutes. Column 2 holds y, the pages printed.
3. Multiply each minute by the rate: $1 \rightarrow 35 \cdot 2 \rightarrow 70 \cdot 3 \rightarrow 105$
4. Check: each time x grows by one minute, y grows by the same 35 pages.

Answer: x: 1, 2, 3 minutes and y: 35, 70, 105 pages. Pages printed depends on minutes.

Practice

Complete each exercise. Show the reasoning that supports your answer.

1. Movie tickets cost \$2 each. The table pairs tickets bought (x) with total cost (y). Complete the table, then name the variable that DEPENDS on the other — type cost or tickets.

Complete each step, then write the final answer.

1. Cost of 2 tickets: $2 \times 2 = \underline{\hspace{1cm}}$.
2. Cost of 3 tickets: $3 \times 2 = \underline{\hspace{1cm}}$.
3. The total changes BECAUSE the tickets change, so the dependent variable is the (type cost or tickets).

Answer: _____

2. Movie tickets cost \$9 each. The table pairs tickets bought (x) with total cost (y). Complete the table, then name the variable that DEPENDS on the other — type cost or tickets.

Complete each step, then write the final answer.

1. Cost of 2 tickets: $2 \times 9 = \underline{\hspace{1cm}}$.
2. Cost of 3 tickets: $3 \times 9 = \underline{\hspace{1cm}}$.
3. The total changes BECAUSE the tickets change, so the dependent variable is the (type cost or tickets).

Answer: _____

3. Movie tickets cost \$4 each. The table pairs tickets bought (x) with total cost (y). Complete the table, then name the variable that DEPENDS on the other — type cost or tickets.

Complete each step, then write the final answer.

1. Cost of 2 tickets: $2 \times 4 = \underline{\hspace{1cm}}$.
2. Cost of 3 tickets: $3 \times 4 = \underline{\hspace{1cm}}$.
3. The total changes BECAUSE the tickets change, so the dependent variable is the (type cost or tickets).

Answer: _____