

Lesson 9-1 • Group 1

Reinforce Understanding

9.1 Small Group • Group 1

With my small group, I can recognize when two quantities change together, and identify which one is the independent variable and which is the dependent variable — one step at a time, with support.

Worked model

Jaden walks dogs after school. The more hours he walks, the more money he earns. Which variable is independent, and which is dependent?

1. Name the two quantities: hours walked and money earned.
2. Which is chosen? Jaden picks his hours — hours walked is the independent variable.
3. Which responds? The money changes because the hours change — money earned is dependent.
4. Sentence check: 'Money earned depends on hours walked.' The sentence makes sense.

Answer: Independent variable: hours walked. Dependent variable: money earned.

Practice

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

1. Sort each quantity: independent or dependent?

Write the name of the correct group on each line.

Groups: Independent variable (input) Dependent variable (output)

- _____ Hours of sunlight a tray of seedlings gets
- _____ Months of gym membership
- _____ Minutes spent jogging
- _____ Height the seedlings grow
- _____ Total cost of the membership
- _____ Calories burned on the jog

2. Claire burns Calories at a steady rate: 30 minutes burns 123 Calories. Complete the table.

Complete the table. Show how you found each value.

Minutes jogged (independent)	Thinking	Calories burned (dependent)
30		
60		
90		

Show your work
