Answers and talk notes

Explore Relationships Between Two Variables

What your student is learning

Tonight we look at two quantities that change together and decide which one is the independent variable and which is the dependent variable.

Answers

Ask your student to explain before you look.

1. **B.** hours worked. hours worked is the independent variable, because you choose how many hours to work.
2. **A.** height of the plant. height of the plant is the dependent variable, because it changes in response to the water.
3. **C.** The first column (input). The first column (input) holds the independent variable.
4. **D.** total cost. total cost depends on the number of pounds, so it is the dependent variable.
5. **B.** It changes because of the other variable. It changes because of the other variable, so it depends on it.
6. **C.** 8. The output is 8, because 8 is in the same row as input 2.

Talk about it

Which one did you pick first, and which one followed from your pick?

Home mission

Use coins. Lay out $4 for 1 hour and $8 for 2 hours of stand work. Ask, "Which number do we choose? Which one depends on it?" Can your student say, "The pay depends on the hours"?

When they are stuck, ask

- Which one did someone get to decide?
- Which one changed because of the other?
- Can you say it with the words "depends on"?

Try not to say

- The first one mentioned is always independent.
- It does not matter which is which.
- The bigger number is the dependent variable.