

Q1: Identify the dependent variable in the following situation: Ethan spent d dollars on n pens.

- ☐ A the number of dollars, d
- ☐ B the number of pens, n

Q2: Identify the independent variable in the following situation: A garden hose runs for h hours and produces g gallons of water.

- ☐ A the number of hours, h
- ☐ B the gallons of water, g

Q4: Consider these related quantities: The area of a wall to be painted and the amount of paint needed to paint that area.

▶ Which quantity is the dependent variable?

- ☐ A The quantity of paint needed
- ☐ B The area of the wall to be painted
- ☐ C Neither

▶ Which quantity is the independent variable?

- ☐ A Neither
- ☐ B The quantity of paint needed
- ☐ C The area of the wall to be painted

Q3: Consider these related quantities: a call duration and its cost.

▶ Which quantity is the independent variable?

- ☐ A The call duration
- ☐ B The call cost
- ☐ C Neither

▶ Which quantity is the dependent variable?

- ☐ A The call cost
- ☐ B Neither
- ☐ C The call duration

Q6: James wants to investigate the relationship between the temperature of the oven and the time it takes to cook 1 kilogram of potatoes.

▶ What is the dependent variable?

- ☐ A The oven temperature
- ☐ B The cooking time
- ☐ C The mass of the potatoes
- ☐ D None

▶ What is the independent variable?

- ☐ A The oven temperature
- ☐ B The mass of the potatoes
- ☐ C None
- ☐ D The cooking time