Write Equations to Represent Relationships Between Two Variables

Write an equation from a table to show how two variables are related.

Name _____ **Date** _____

Tonight's spark

Miguel joined a gym. The table shows 1 month, $24.95; 2 months, $49.90; 3 months, $74.85. How much will 10 months of membership cost?

Guess first: is 10 months more than $200, or less?

Months (m)	Total cost (c)
1	$24.95
2	$49.90
3	$74.85
10	?

× 24.95

Our class model: rate × amount

Try it

Work it out on paper. Write one answer on each line.

1 **A table shows x = 1, 2, 3 and y = 4, 8, 12. Which equation fits?**

A. y = x + 3 **B.** y = 4x **C.** y = x + 4 **D.** y = 12x

My answer _____

2 **A snack costs $3 each. Which equation shows the cost c for n snacks?**

A. c = n + 3 **B.** c = 3 ÷ n **C.** c = 3n **D.** n = 3c

My answer _____

3 **In y = 5x, what is y when x = 4?**

A. 20 **B.** 9 **C.** 1 **D.** 45

My answer _____

4 **In d = 60t, which letter is the independent variable?**

A. d **B.** 60 **C.** t **D.** =

My answer _____

5 **In y = 7x, what is x when y = 28?**

A. 21 **B.** 35 **C.** 196 **D.** 4

My answer _____

6 **A table shows x = 2, 4, 6 and y = 6, 12, 18. Which equation fits?**

A. y = x + 4 **B.** y = 3x **C.** y = 2x **D.** y = 6x

My answer _____

Talk about it

If m is 2, does 24.95 + m match the table's cost for 2 months?

Home mission

Find a monthly bill, like a phone or streaming plan. Ask your student, "What is the price each month?" Can they write c = (that price) × m and test it with 2 months?

If we get stuck, ask

- How much does the total change from one row to the next?
- What should each letter stand for?
- Does your equation work on every row?

Do it on a screen

Scan or type the link. Same lesson, with hints.

eduwonderlab.com/lessons/9-3/homework.html

How did it feel? (optional)

Tricky Getting there Got it