

Proportional Relationships with Tables

Complete the table. State the constant of proportionality.

1)

| | | | | | |
|------------------|---|----|---|----|----|
| Minutes | 2 | | 5 | | 11 |
| Distance (in cm) | | 80 | | 72 | 88 |

2)

| | | | | | |
|---------------|----|----|---|----|---|
| Hours | | 12 | 5 | | 6 |
| Pages Written | 20 | 60 | | 45 | |

Determine if the table is proportional.
If it is, state the constant of proportionality.
If it is not, explain why.

3)

| | | | | | |
|-----------|----|---|----|---|----|
| Portraits | 7 | 1 | 5 | 3 | 9 |
| Hours | 21 | 3 | 15 | 9 | 27 |

4)

| | | | | | |
|----------|----|---|----|----|----|
| Families | 8 | 2 | 6 | 4 | 9 |
| Children | 24 | 6 | 16 | 12 | 27 |

5)

| | | | | | |
|------------|----|---|----|---|----|
| # of Balls | 9 | 1 | 5 | 3 | 8 |
| Price (\$) | 18 | 3 | 10 | 6 | 16 |

Create a table. Then determine if it is proportional. If it is, state the constant of proportionality. If it is not, explain why.

6) Maia drives 150 miles in 3 hours, 250 miles in 5 hours, and 400 miles in 8 hours.

7) An elevator rises 40 feet in 2 seconds, 100 feet in 5 seconds, and 180 feet in 9 seconds.

8) Drew types 45 words in 1 minute, 120 words in 3 minutes, and 184 words in 4 minutes.

Proportional Relationships with Tables

Complete the table.

9)

| | | | | |
|--------|----|-----|-----|----|
| inches | 72 | 180 | 432 | |
| yards | 2 | 5 | 12 | 15 |

10)

| | | | | |
|---------|----|---|----|-----|
| hours | 3 | 4 | 6 | 10 |
| dollars | 45 | | 90 | 150 |

11)

| | | | | |
|-------|-----|---|-----|-----|
| miles | 104 | | 234 | 416 |
| hour | 2 | 3 | 4.5 | 8 |

Determine if the table shows a constant of proportionality. If it does, state the constant of proportionality; if it does not, explain why.

12)

| | | | | |
|-------------------|----|----|----|---|
| pieces of chicken | 7 | 8 | 6 | 2 |
| price in dollars | 14 | 16 | 12 | 4 |

13)

| | | | | |
|-----------------|----|----|-----|-----|
| boxes of candy | 2 | 5 | 9 | 7 |
| pieces of candy | 32 | 80 | 144 | 112 |

14)

| | | | | |
|--------|---|----|----|----|
| week | 2 | 5 | 3 | 7 |
| height | 8 | 25 | 12 | 28 |

Proportional Relationships with Tables

- 15) When making coffee, Zachary uses 3 tablespoons of ground coffee for every 12 ounces of water. Complete the table by displaying this rate as well as four other equivalent ratios. Then explain how you calculated the equivalent ratios you wrote.

| Coffee (in Tbs) | Water (in oz) |
|--------------------|------------------|
| | |
| | |
| | |
| | |

Proportional Relationships with Tables

- 16) An online bookseller charges a flat fee of \$2 plus \$1 per book for shipping. Complete the table and determine if the relationship is proportional. Show your work. Explain why or why not it is proportional.

| | | | | |
|-----------|---|---|---|---|
| Books | 1 | 2 | 3 | 4 |
| Cost (\$) | | | | |

Proportional Relationships with Tables

Determine if the relationships are proportional. Explain your reasoning.

17)

1

| Year | Profit (\$) |
|------|-------------|
| 1 | 10,000 |
| 2 | 20,000 |
| 3 | 40,000 |

2

| Gallons | Miles |
|---------|-------|
| 1 | 1 |
| 2 | 4 |
| 3 | 7 |
| 4 | 10 |

3

| Hours | Wage |
|-------|----------|
| 1 | \$ 8.00 |
| 2 | \$ 16.00 |
| 3 | \$ 24.00 |
| 4 | \$ 32.00 |

Proportional Relationships with Tables

- 18) Nora is going shopping for shoes for the 12 members of the dance team. If the cost of each pair of shoes is the same regardless of size, is the relationship proportional? Explain.