LESSON MAKER PRO

Ratio Table Trek

Build tables that show equal ratios.

GRADE 6 · 6.PFA.1.f

6.PFA.1.f "Create a table of equivalent ratios to represent a proportional relationship between two quantities, when given a contextual situation."

NAME _____ DATE _____

KEEP RATIOS EQUAL

A proportional relationship keeps the same ratio in every row. Multiply or divide both quantities by the same number to make equivalent ratios.

WORKED EXAMPLE

Eleven art kits use 44 markers. Create a table for 11, 22, and 33 art kits.

1. Start with 11 art kits and 44 markers.
2. Double both quantities for 22 art kits.
3. Triple both quantities for 33 art kits.

Answer: Art kits: 11, 22, 33; Markers: 44, 88, 132

PRACTICE 6 problems

1 Six posters need 18 clips. Complete the table. Posters: 6, 12, 30 Clips: 18, __, __

ANSWER _____

2 A hiker walks 8 kilometers in 2 hours at a constant rate. Complete the table. Hours: 2, 6, 10 Kilometers: 8, __, __

ANSWER _____

3 A paint mix has 14 red drops for every 21 blue drops. Complete the table. Red drops: 14, 28, 42 Blue drops: 21, __, __

ANSWER _____

4 A club packs 16 snack bags with 48 crackers. Complete the table. Snack bags: 16, 32, 64 Crackers: 48, __, __

ANSWER _____

5 A player earns 25 points in 5 games. Complete the table. Games: 5, 15, 20 Points: 25, __, __

ANSWER _____

6 A printer makes 12 pages in 3 minutes. Complete the table. Minutes: 3, 6, 9 Pages: 12, __, __

ANSWER _____

APPLY IT Show your work

1 At a school fundraiser, Kai's gaming club sells 4 wristbands for $28. Create a table that shows the cost of 8, 12, and 20 wristbands.

WORK SPACE

ANSWER _____

2 At a basketball arcade, 3 tokens pay for 2 plays. Create a table that shows the tokens needed for 4, 8, and 14 plays.

WORK SPACE

ANSWER _____

CHALLENGE One step up

A robot travels 18 meters in 3 minutes at a constant rate. Create a table for 3, 5, 8, and 12 minutes. Then explain why the rows are equivalent ratios.

WORK SPACE AND ANSWER

ANSWER KEY # Ratio Table Trek

GRADE 6 · 6.PFA.1.f

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Six posters need 18 clips. Complete the table. Posters: 6, 12, 30 Clips: 18, __, __	**Clips: 18, 36, 90**
2	A hiker walks 8 kilometers in 2 hours at a constant rate. Complete the table. Hours: 2, 6, 10 Kilometers: 8, __, __	**Kilometers: 8, 24, 40**
3	A paint mix has 14 red drops for every 21 blue drops. Complete the table. Red drops: 14, 28, 42 Blue drops: 21, __, __	**Blue drops: 21, 42, 63**
4	A club packs 16 snack bags with 48 crackers. Complete the table. Snack bags: 16, 32, 64 Crackers: 48, __, __	**Crackers: 48, 96, 192**
5	A player earns 25 points in 5 games. Complete the table. Games: 5, 15, 20 Points: 25, __, __	**Points: 25, 75, 100**
6	A printer makes 12 pages in 3 minutes. Complete the table. Minutes: 3, 6, 9 Pages: 12, __, __	**Pages: 12, 24, 36**

PART 2 · APPLY IT

1. **Wristbands: 4, 8, 12, 20; Cost: $28, $56, $84, $140** Each wristband costs $7. Multiply the number of wristbands by 7 to fill each row.
2. **Plays: 2, 4, 8, 14; Tokens: 3, 6, 12, 21** Double, quadruple, and multiply the original ratio by 7. Each row keeps the ratio of 3 tokens to 2 plays.

CHALLENGE

Minutes: 3, 5, 8, 12; Meters: 18, 30, 48, 72. The robot travels 6 meters each minute, so every row has the same rate.

Accept correctly ordered tables or tables with the same paired values in a different order. For the challenge explanation, accept a statement that identifies the constant rate of 6 meters per minute or explains that both quantities keep the same ratio.