


Vocabulary: For numbers 1-3, write each definition.

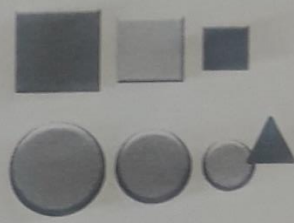
- 1) A ratio is a comparison of 2 numbers
- 2) A rate is a ratio that compares quantities measured in different units
- 3) A unit rate is a comparison of 2 measurements in which one of the terms has a value of 1.

Please remember to
ssssssssimplify!



Solve the following ratio problems.

- 4a) 1:1 What is the ratio of circles to squares?
- b) Circle one: Is this ratio part-to-part or part-to-whole?
- 5a) 3:7 What is the ratio of circles to ALL shapes?
- b) Circle one: Is this ratio part-to-part or part-to-whole?
- 6a) 1:6 What is the ratio of triangles to circles and squares?
- b) Circle one: Is this ratio part-to-part or part-to-whole?



Solve for the missing values in the ratio tables.

7) $\times 5 \uparrow$

15	60	90	150
3	12	18	30

8) $\begin{matrix} 3 \\ - \\ 4 \end{matrix}$

6	9	36	66
8	12	48	88

Handwritten arrows show: $6 \times 3 = 18$, $9 \times 4 = 36$, $36 \times 2 = 72$, $66 \times 2 = 132$, $8 \times 3 = 24$, $12 \times 4 = 48$, $48 \times 2 = 96$, $88 \times 2 = 176$.

9) $\times 2 \uparrow$

2	14	20	30
1	7	10	15

10) $\times 3 \downarrow$

3	6	9	12
9	18	27	36

11)

5	25	50	60
3	15	30	36

Handwritten arrows show: $5 \times 5 = 25$, $25 \times 2 = 50$, $50 \times 1.2 = 60$, $3 \times 5 = 15$, $15 \times 2 = 30$, $30 \times 1.2 = 36$.

12)

16	8	4	2
20	10	5	2.5

Handwritten arrows show: $16 \div 2 = 8$, $8 \div 2 = 4$, $4 \div 2 = 2$, $20 \div 2 = 10$, $10 \div 2 = 5$, $5 \div 2 = 2.5$.

Solve the following unit rate problems. Show your work!

13) \$ 8 per pizza Jordan spent \$96 for 12 pizzas for a party. What is the unit rate?

$$\begin{array}{r} 8 \\ 12 \overline{)96} \\ \underline{-96} \\ 0 \end{array}$$

14) \$ 9 per pizza Skylar spent \$72 on 8 pizzas for a party. What is the unit rate?

$$\begin{array}{r} 9 \\ 8 \overline{)72} \\ \underline{-72} \\ 0 \end{array}$$

15) Jordan In numbers ~~7-8~~ above, who got the "better deal?"
(it's cheaper per pizza)

13-14

Use the table to answer #16

Racecar Driver	Rate	Unit Rate (miles per hour)
Mrs. Ledesma	900 miles/15 hours	60 mph
Mrs. Bothers	420 miles/6 hours	70 mph

16) a. 60 mph What was Mrs. Ledesma's unit rate, in miles per hour?

b. 70 mph What was Mrs. Bothers's unit rate, in miles per hour?

c. Bothers Who traveled faster?

$$\begin{array}{r} 60 \\ 15 \overline{)900} \\ \underline{-900} \\ 0 \end{array}$$

$$\begin{array}{r} 70 \\ 6 \overline{)420} \\ \underline{-420} \\ 0 \end{array}$$

Ratios & Rates

17) C Write the letter of the pair that is NOT an equivalent ratio.

a) $\frac{15}{10} = \frac{3}{2}$ ✓

b) $\frac{14}{20} = \frac{7}{10}$ ✓

c) $\frac{12}{40} = \frac{6}{10}$

d) $\frac{25}{10} = \frac{10}{4}$ ✓ = simplify $\frac{25 \div 5}{10 \div 5} = \frac{5}{2}$
simplify $\frac{10 \div 2}{4 \div 2} = \frac{5}{2}$

18) 200 Joao sent 240 texts in 12 days. At this rate, how many texts will he send in 10 days?

$$\frac{240 \text{ texts} \div 12}{12 \text{ days} \div 12} = \frac{20 \text{ texts}}{1 \text{ day}}$$

$$20 \text{ texts per 1 day} = 200 \text{ texts in 10 days}$$