

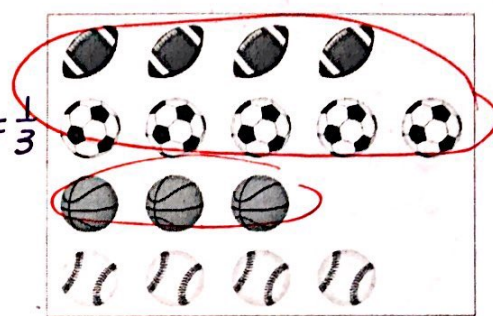
Vocabulary

For numbers 1-3, write the definition for each term.

- 1) Define rate: A ratio that compares quantities in diff. units.
 2) Define unit rate: Comparison of 2 quantities in which one term has a value of zero.
 3) Define ratio: A comparison of 2 numbers.

Use the picture to the right to answer questions 5-8

- 4) What is the ratio of footballs to ALL balls?
 $4:16$ $\frac{4}{16} = \frac{1}{4}$ $1:4$ $\frac{1}{4}$ $1 \text{ to } 4$
- 5) What is the ratio of basketballs to soccer balls and footballs?
 $3:9$ $\frac{3}{9} = \frac{1}{3}$ $1:3$ $\frac{1}{3}$ $1 \text{ to } 3$



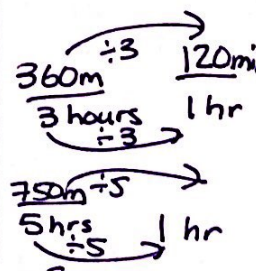
- 6) Was the ratio in question #5 a part to part or part to whole ratio?
PART TO PART
- 7) Write a ratio that show a part to part relationship.
 $4 \text{ BB} : 3 \text{ BB}$ $4f : 5s$
- 8) Write a ratio that shows a part to whole relationship.
 $4 \text{ baseballs} : 16 \text{ total}$ $7 \text{ Base Basketball} : 16 \text{ TOTAL}$
- 9) An animal shelter has 18 kittens and 9 puppies available for adoption. What is the ratio of puppies to kittens?
 $9:18$ $\frac{9}{18} = \frac{1}{2}$ $1:2$ $\frac{1}{2}$ $1 \text{ to } 2$
- 10) ECMS spent \$105 for 15 pizzas for the Homework Stars Party. What is the unit rate (price per pizza)?
 $\frac{\$105}{15} = \7 $\$7 \text{ per pizza}$ $15 \overline{)105}$ $\frac{3}{5}$ $\frac{7}{105}$

11) Use ratio language to write the following: 4 bananas : 2 apples
FOR EVERY 4 BANANAS THERE ARE 2 APPLES

Use the table to answer question 12-14

The table below shows the rates of 2 racecars in a race. Evaluate the unit rates to complete the chart.

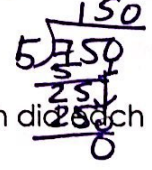
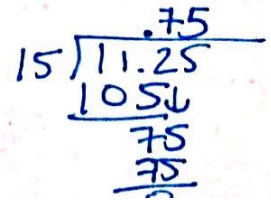
Racecar	Rate	Unit Rate (miles per hour) OR (miles per hour)
Red Car	360 miles/3 hours	12) 120 miles/hour
Yellow Car	750 miles/5 hours	13) 150 miles per hour



- 14) In the chart above, which car was the fastest? **Yellow**
- 15) Kayla bought 6 candies for \$3.60. Isaac bought 15 candies for \$11.25. How much did each student pay per candy?

Kayla = $\frac{\$3.60}{6} = \$0.60/\text{candy}$

Isaac = $\frac{\$11.25}{15} = \$0.75/\text{candy}$



16) Complete the ratio table.

13	26	39	52
1	2	3	4

$$\begin{array}{r} 13 \\ \times 4 \\ \hline 52 \end{array}$$

17) Complete the ratio table.

4	12	20	32
7	21	35	56

18) Complete the ratio table.

2	6	18	60
3	9	27	90

19) Is the pair of ratios equivalent?

Yes

$$\frac{2}{3} = \frac{4 \div 2}{6 \div 2} = \frac{2}{3}$$

$$\frac{2}{3} = \frac{4}{6}$$

20) Is the pair of ratios equivalent?

Yes

$$\frac{14}{20} = \frac{7}{10}$$

$$\frac{7}{10} = \frac{7}{10}$$

$$\frac{14}{20} = \frac{7}{10}$$

21) Is the pair of ratios equivalent?

NO

$$\frac{12}{40} = \frac{6}{20}$$

$$\frac{3}{10} = \frac{6 \div 2}{10 \div 2} = \frac{3}{5}$$

22) Jayda sent 72 texts in 6 days. At this rate, how many texts will she send in 10 days?

$$\frac{\text{Text } 72}{\text{Day } 6} = \frac{\quad}{10}$$

T	72	120	12
D	6	10	1

120 TEXTS IN 10 DAYS

23) Coke costs \$3.90 for 6 cans and Pepsi costs \$2.80 for 4 cans. Which one is the better deal?

$$6 \overline{) 3.90} \\ \underline{36} \\ 30 \\ \underline{30} \\ 0$$

$$4 \overline{) 2.80} \\ \underline{28} \\ 00$$

COKE

Coke = \$0.65
Pepsi = \$0.70

24) Dunkin donuts sells a dozen donuts for \$13.44, Krispy Cream sells a half dozen for \$5.94. Which one is the better deal?

DD = \$1.12
KC = \$0.99

KRISPY CREAM

$$6 \overline{) 5.94} \\ \underline{54} \\ 54 \\ \underline{54} \\ 0$$

25) Explain how to simplify a ratio:

FIND A COMMON FACTOR OF TOP + BOTTOM # + DIVIDE BY THAT FACTOR. YOU KNOW YOU'RE DONE WHEN ONLY COMMON IS ONE FACTOR
Simplify the following ratios:

26) 9 to 27

$$\frac{9 \div 9}{27 \div 9} = \frac{1}{3}$$

27) 4 : 26

$$\frac{4 \div 2}{26 \div 2} = \frac{2}{13}$$

28) $\frac{14}{56}$

$$\frac{14 \div 7}{56 \div 7} = \frac{2 \div 2}{8 \div 2} = \frac{1}{4}$$

229) 11 : 13

$$\frac{11}{13}$$