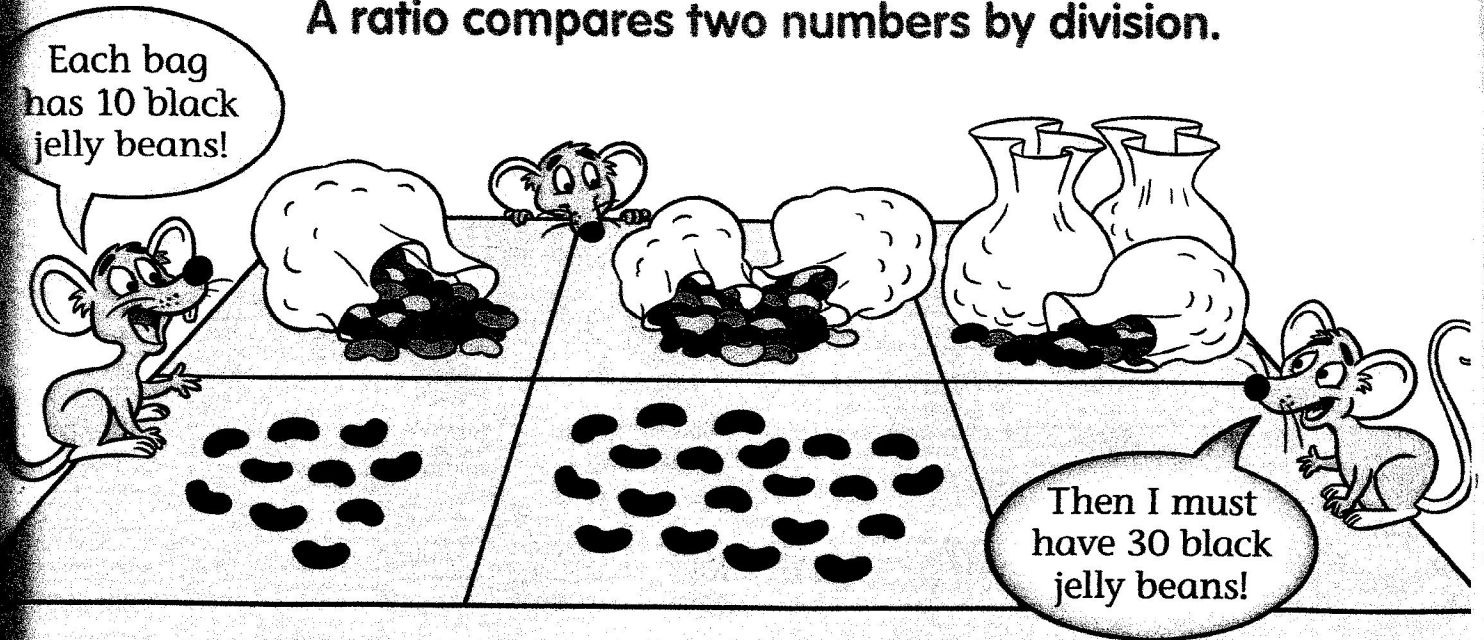


Ratio and Rate

Skill: Solve word problems using ratio (function) tables and unit rates

A ratio compares two numbers by division.



- 1 Lay out the mats and sort the cards by size into two groups.
- 2 Look at the **function tables** mat and place number cards in the colored squares to correctly complete each table.
- 3 Use the completed function tables to help you answer the questions on the response form.
- 4 Next, look at the **unit rates** mat and compute the amount per unit for each pair of items.
- 5 Find the card that shows the unit rate of each item and place it in the box next to the item.
- 6 Complete the response form to show which item in each pair is the better deal.

Ratio and Rate unit rates

Ratio and Rate function tables

1 Tree Planting Project

number of trees	1	5	10	20
number of hours	25	125	250	625

Bake Sale

dozens of cookies	1	4	5	10
copies of flour	$\frac{3}{4}$	$1\frac{1}{2}$		6

3 On the Map (map scale: 1 cm = 6.2 miles)

centimeters	2	6	8	12
miles	12.4	24.8	62	

Unit rate cards: $\frac{3}{4}$, 74.4, 49.6, \$0.29, \$1.70, \$0.05, \$0.49

1

Tree Planting Project



number of acres	1	5		15	20	
number of trees	25		250			625

2

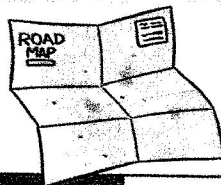
Bake Sale



dozens of cookies	1		4	5		10
cups of flour	$\frac{3}{4}$	$1\frac{1}{2}$			6	

3

On the Map



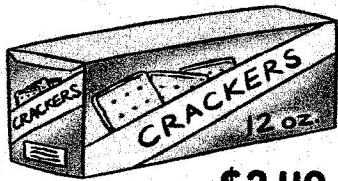
(map scale: 1 cm = 6.2 miles)

centimeters	2		6	8		12
miles	12.4	24.8			62	

Ratio and Rate

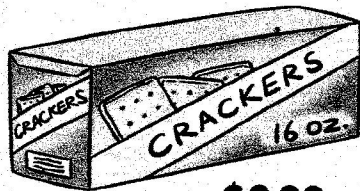
unit rates

1



\$3.49

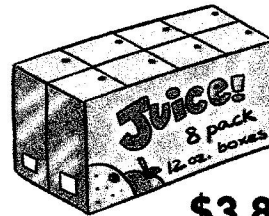
per ounce



\$3.99

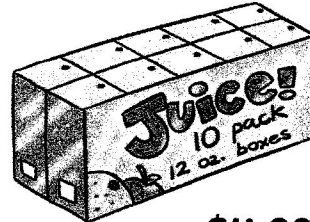
per ounce

2



\$3.85

per box



\$4.89

per box

3



\$7.75

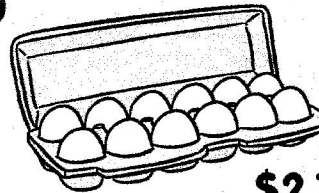
per pound



\$8.50

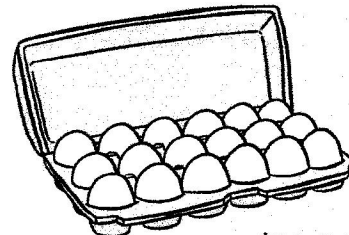
per pound

4



\$2.78

per egg



\$4.35

per egg

5



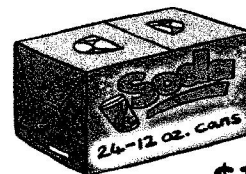
\$2.39

per quart



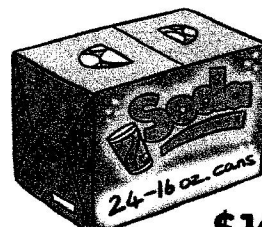
\$3.29

6



\$14.49

per ounce



\$16.20

10	25	125	\$0.29	\$0.25
375	500	2	\$0.48	\$0.49
8	3	$3\frac{3}{4}$	\$1.70	\$1.72
$7\frac{1}{2}$	4	10	\$0.23	\$0.24
37.2	49.6	74.4	\$1.20	\$0.82
			\$0.04	\$0.05

Ratio and Rate

Function Tables

Look at the mat. Use the function tables to help you solve the word problems below. Show your work in the space provided.

- 1 The students at Oak Forest Middle School raised \$1,000.00 to buy oak seedlings for an Arbor Day tree planting project. How many acres of trees can be planted with the money that the students raised if each seedling costs \$2.00?

Answer: _____

- 2 Rosa and Marco bought $1\frac{1}{2}$ pounds of flour to make cookies for the school bake sale. How many dozen cookies can they make if there are 4 cups of flour per pound?

Answer: _____

- 3 Travis and his mom were driving to a family reunion when the fuel light came on in the car. The light signaled that there were only 3 gallons of gas left in the tank. Travis measured the distance to their destination on the map. It was 15 cm. If the car gets 22 miles per gallon, how far would they be from the reunion when the car ran out of gas?

Answer: _____

Unit Rates

Look at the mat. Fill in the circle next to the item in each pair that is the better deal (has the lower unit rate).

crackers: 12 oz.

juice box: 8 pack

dog food: $4\frac{1}{2}$ lbs.

crackers: 16 oz.

juice box: 10 pack

dog food: 5 lbs.

eggs: 1 dozen

milk: $\frac{1}{2}$ gallon

soda: 24–12 oz. cans

eggs: $1\frac{1}{2}$ dozen

milk: 1 gallon

soda: 24–16 oz. cans