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### 5.1 Practice A

## Write the ratio in two ways. Explain what the ratio means.

1. flies to lizards

2. notebooks : pencils


Use the table to write the ratio. Explain what the ratio means.
5. tubas : flutes
6. trumpets : tubas
7. flutes : tubas
8. trumpets : flutes
2. cars: trucks

4. hamburgers to hot dogs


| Instrument | Number |
| :---: | :---: |
| Tubas | 2 |
| Flutes | 5 |
| Trumpets | 3 |

You and a friend make a total of 45 bird houses. Use the tape diagram to find how many bird houses you make.
9. You:


Friend: $\square$
10. You:

Friend: $\square$
11. There are 3 buses to carry 96 students on a field trip. Write the ratio of buses to students.
12. There are 18 pieces of chalk. The ratio of chalk that is yellow to chalk that is not yellow is $1: 2$. How many pieces of chalk are yellow?
13. The ratio of students to teachers at a school is $19: 1$. How many students are there in each total number of people?
a. 100 people
b. 280 people
c. 440 people
d. 760 people
14. You spend 90 minutes practicing flip tricks and slides on your skate board. The ratio of time spent on flip tricks to time spent on slides is $7: 8$. How much time do you spend practicing slides?
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### 5.2 Practice A

Write several ratios that describe the collection.

1. paper clips to index cards

2. books to pencils


Find the missing value in the ratio table. Then write the equivalent ratios.
3.

| Cars | Trucks |
| :---: | :---: |
| 3 | 5 |
| 6 |  |

4. 

| TVs | Computers |
| :---: | :---: |
| 2 | 7 |
|  | 21 |

## Complete the ratio table to solve the problem.

5. For every 2 cars you wash, your friend washes 3 cars. You wash a total of 8 cars. How many does your friend wash?

| You | Friend |
| :---: | :---: |
| 2 | 3 |
|  |  |
|  |  |
| 8 |  |

6. Your closet has 5 shirts for every 2 sweaters. Your closet has 30 shirts. How many sweaters are in your closet?

| Shirts | Sweaters |
| :---: | :---: |
| 5 | 2 |
| 10 |  |
|  | 10 |
| 30 |  |

7. You are making a salad. The ratio of olives to croutons is $5: 3$. You put 12 croutons in your salad. How many olives do you put in your salad?
$\qquad$

### 5.3 Practice A

## Write a rate that represents the situation.

1. Kilograms

2. Strokes


## Write a unit rate for the situation.

3. $\$ 44$ in 4 days
4. 256 heartbeats in 4 minutes
5. 12 cans for 6 people
6. 85 drops in 5 minutes
7. 12 haircuts in 4 hours
8. 15 liters in 3 minutes
9. 27 outs in 9 innings
10. 36 children from 12 families

## Decide whether the rates are equivalent.

11. 17 heartbeats in 15 seconds, 68 heartbeats in 60 seconds
12. 96 miles on 4 gallons, 380 miles on 15 gallons
13. You receive 9 text messages in 12 minutes. What is the rate of text messages per hour?
14. You studied for 14 hours last week. What was your unit rate of hours of study per day?
15. In a walk for charity, you walk at a rate of 100 meters per minute. How long does it take you to walk 2 kilometers?
16. A deli sells a sandwich spread for $\$ 6.40$ per pound. How much do you have to pay for 24 ounces of the spread?
17. You can buy 3 sandwiches for $\$ 4.95$ or 4 sandwiches for $\$ 6.72$. Which is the better buy?
18. You can buy 20 ounces of cereal for $\$ 4.40$ or 16 ounces of the same brand for $\$ 3.68$. Which is the better buy?
$\qquad$

### 5.4 Practice A

Determine which car gets the better gas mileage.
1.

| Car | A | B |
| :--- | :---: | :---: |
| Distance (miles) | 130 | 125 |
| Gallons used | 8 | 9 |

2. 

| Car | A | B |
| :--- | :---: | :---: |
| Distance (miles) | 400 | 440 |
| Gallons used | 12 | 15 |

## Determine which is the better buy.

3. 

| Chord Charts | A | B |
| :--- | :---: | :---: |
| Cost (dollars) | 13 | 18 |
| Downloads | 10 | 15 |

4. 

| Pens | A | B |
| :--- | :---: | :---: |
| Cost (dollars) | 5 | 2 |
| Pens | 20 | 7 |

5. Protein Bar A has 15 grams of protein in a 40 gram bar. Protein Bar B has 20 grams of protein in a 60 gram bar. Which bar has more protein per gram?

Complete the ratio tables and graph the ordered pairs from the table. What can you conclude?

6. | Miami, FL |  |
| :---: | :---: |
| Time (min) | Temperature Drop (F) |
| 5 | 2 |
| 10 |  |
| 15 |  |
| 20 |  |$\quad$| Orlando, FL |  |
| :---: | :---: |
| Time (min) | Temperature Drop (F) |
| 3 | 1 |
| 6 | 9 |
| 12 |  |
7. You are choosing a song for your dance recital. Song A has 11 beats in 10 seconds. Song B has 7 beats in 6 seconds. Which song has the greater rate?
