

Name _____

Date _____

Understand Ratios: Play Answer Sheet

Selected-Response Items—Indicate the letter(s) only.

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

Fill-in-the-Blank Items

7. _____

8. _____

9. _____

10. _____

11. _____

12. (a) _____

(b) _____

13. (a) _____

(b) _____

14. (a) _____

(b) _____

(c) _____

(d) _____

(e) _____

(f) _____

(g) _____

15. (a) _____

(b) _____

(c) _____

Understand Ratios: Play

Number of Questions: 15

Questions 1–6 are selected-response questions. Write the letters of the correct answers on the answer sheet.

1. Franklin made a list of school subjects and asked his classmates to choose the one they liked the most. The table shows the results of his survey.

| Subject | Number of Classmates |
|---------|----------------------|
| Reading | |
| History | |
| Science | |
| Math | |

What is the ratio of classmates who chose reading to classmates who chose math?

- A.** 4:7 **B.** 7:4 **C.** 4:11
D. 11:4 **E.** 7:11
2. For each home run hit in a baseball game, a company has promised to donate \$50 to charity.
- What are some ways to write the ratio of home runs to dollars?
Select all that apply.
- A.** $\frac{50}{1}$ **B.** $\frac{1}{50}$ **C.** 50 to 1 **D.** 1 to 50
3. Topher has 6 pairs of pants and 8 shirts in his closet. Look at the following ratios about Topher’s clothes.
- Which are part-to-whole ratios? *Select all that apply.*
- A.** 6:8 **B.** 6:14 **C.** 8:14 **D.** 8:6
4. If a ratio of gallons of milk to cups of sugar is 4 to 1, select all the statements that use rate language to describe the ratio. *Select all that apply.*
- A.** Gallons of milk compared to cups of sugar is 4 to 1.
B. There are 4 gallons of milk for every cup of sugar.
C. There is $\frac{1}{4}$ cup of sugar per cup of milk.
D. Milk and flour have a ratio of $\frac{4}{1}$.
E. There is 1 cup of sugar per 4 cups of milk.

5. Look at the table.

Which of the following represents the ratio of hawks to seagulls? *Select all that apply.*

- A. 9:6 B. 6:9 C. $\frac{9}{6}$
- D. 6 to 9 E. $\frac{6}{9}$

| Hawks | Seagulls |
|-------|----------|
| 6 | 9 |
| 12 | 18 |
| 16 | 24 |
| 18 | 27 |

6. A landscape designer is planting two types of flowers in her gardens, roses and tulips. The relationship between the number of roses planted to the number of tulips planted is represented in the table.

The landscape designer wants to keep the same ratio of roses to tulips when she plans bigger gardens.

| Number of Roses | Number of Tulips |
|-----------------|------------------|
| 4 | 3 |
| 8 | 6 |
| 12 | 9 |
| 16 | 12 |

Which statements are true? *Select all that apply.*

- A. This row would be correct to add to the table.
 Number of Roses: 36
 Number of Tulips: 27
- B. The difference between quantity of roses and quantity of tulips changes from one row to another. The ratio stays the same.
- C. The difference between number of roses and number of tulips in the table would be more useful than the ratio between those quantities.
- D. With 320 roses, the landscape designer should plant 240 tulips.

Questions 7–15 are fill-in-the-blank questions. Write the correct answers in the spaces provided on the answer sheet.

7. Orlando bought 8 boxes of cereal. He was disappointed that 6 of the boxes did not contain prizes inside but was happy that the remaining boxes did. What is the ratio of boxes with prizes to all boxes? *Write the entire ratio on the answer sheet.*

_____ : _____

8. Gilda is a marine biologist studying manatees. She recorded the length of a certain manatee calf as 4 feet. She recorded the length of the calf’s mother as 12 feet. Write a ratio to compare the mother’s length to the calf’s length.

The ratio as a fraction is _____.

9. Naomi worked for 1 hour and was paid \$14.

What was the rate at which Naomi was paid per hour?

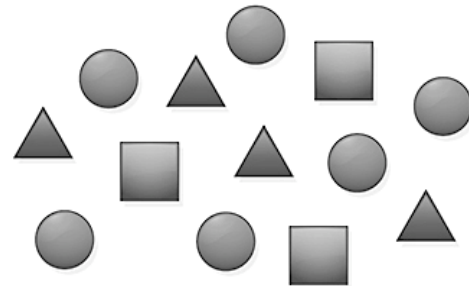
Naomi was paid a rate of \$ _____ per hour.

10. Look at the shapes on the right.

What is the ratio of triangles to squares?

Write the entire ratio on the answer sheet.

_____ : _____



11. The table shows the first 100 lunches sold in the cafeteria today.

What is one way to write the ratio of students who purchased a sandwich to students who did not purchase a sandwich? Write the entire ratio on the answer sheet.

_____ to _____

| Lunches | Number Sold |
|----------|-------------|
| Sandwich | 30 |
| Salad | 40 |
| Pasta | 10 |
| Pizza | 20 |

12. Mrs. Green wrote some statements about the students in her class.

Read each set of statements in order to determine whether the sentence can be completed with one of the words or both. Select all that apply.

A. fraction

B. ratio

There are 8 boys out of 19 total students. In this situation, $\frac{8}{19}$ is a **(a)**_____.

There are 8 boys to 11 girls. In this situation, $\frac{8}{11}$ is a **(b)**_____.

13. All of the students in Mr. Day's classes have either As or Bs. Currently, 23 students have As and 17 students have Bs. Use that information to determine whether the following ratios are comparing part to part or part to whole.

A. 23:40

B. 23:17

C. 17:40

D. 17:23

Part-to-part comparison: **(a)**_____

Part-to-whole comparison: **(b)**_____

