Name _____   **Date** _____

Create Equivalent Ratios: Play Answer Sheet

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

1. _____   2. _____   3. _____

4. _____   5. _____   6. _____

7. _____   8. _____

Fill-in-the-Blank Items

9. (a)_____   (b)_____   (c)_____

10. (a)_____   11. (a)_____   (b)_____   (c)_____

(b)_____   (d)_____   (e)_____   (f)_____
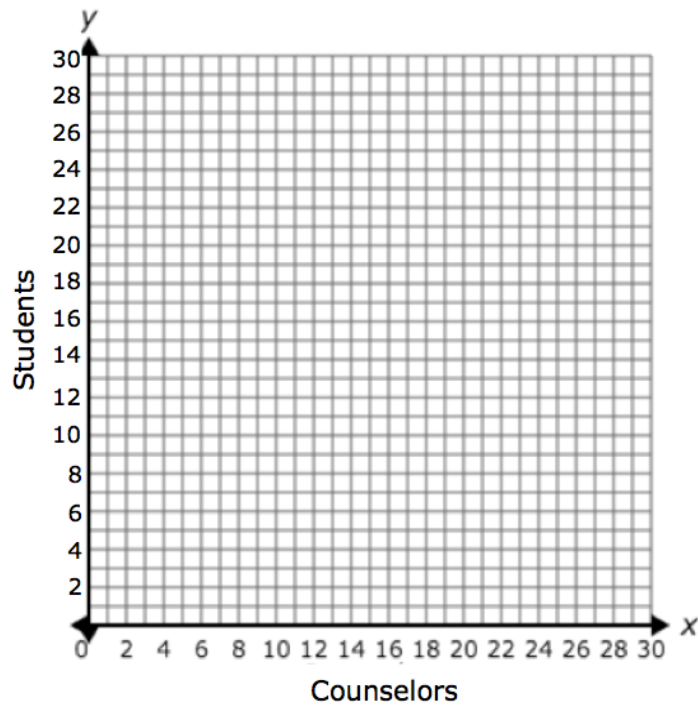
(c)_____

12. (a)_____   13. (a)_____   (b)_____
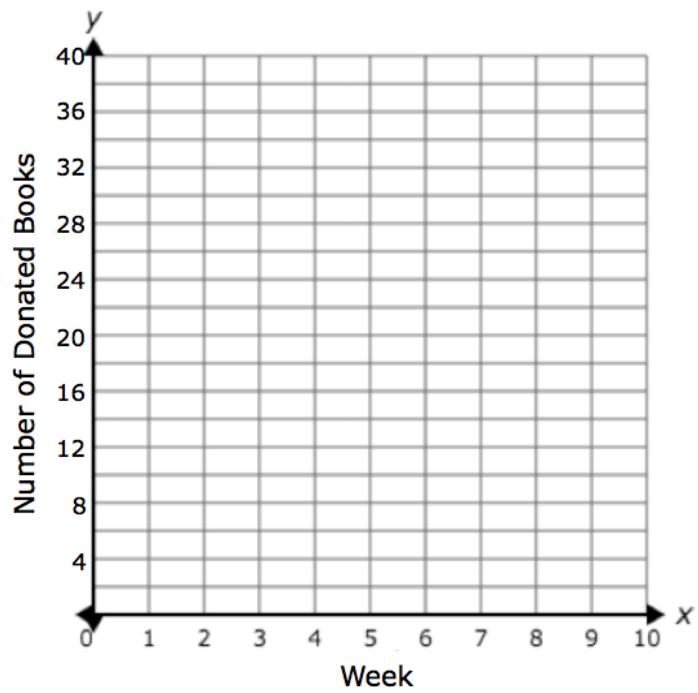
(b)_____   (c)_____   (d)_____   (e)_____

14.

15.

Create Equivalent Ratios: Play

Number of Questions: 15

Questions 1–8 are selected-response questions. Write the letters of the correct answers on the answer sheet.

1. Ms. Elliot is shopping for a new car. She is looking at an electric car that gets 100 miles per gallon of gas and at a traditional car that gets 40 miles per gallon. She wants to write a ratio to compare miles per gallon for the traditional car to miles per gallon for the electric car.

   Which ratios show that comparison? *Select all that apply*.

   A. 4 to 10   **B.** 100 to 40   **C.** $\frac{2}{5}$ **D.** 40:100

2. Delia burns 150 calories for every 20 minutes of exercise she does.

   Use this ratio of 150 to 20 to determine how many minutes it will take for her to burn 450 calories.

   Use any strategy that you desire to find the answer.

   A. 10 min   **B.** 45 min   **C.** 60 min   **D.** 80 min   **E.** 450 min

3. Tyler saved $45 in 3 months.

   If he continues to save money at the same rate, how much will he save in 15 months?

   Use equivalent ratios to solve this problem.

   A. $135   **B.** $225   **C.** $525   **D.** $675
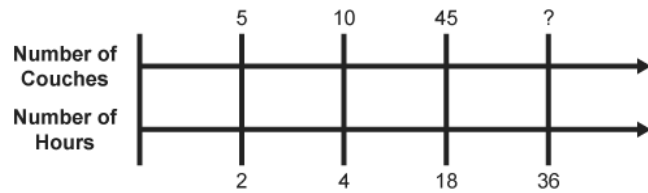
4. The tape diagram shows the ratio of rock songs to classical songs played on the radio.

   Which of the following statements are true? *Select all that apply.*

   A. For every 5 classical songs played on the radio, 20 rock songs are played.

   B. For every 8 rock songs played on the radio, 2 classical songs are played.

   C. The ratio of rock songs to classical songs played on the radio is $\frac{1}{4}$.

   D. If 40 rock songs are played, 10 classical songs would be played.

5. A furniture company makes 10 couches in 4 hours.

At that rate, how many couches can the company make in 36 hours?

	5	10	45	?
Number of Couches				
Number of Hours				
	2	4	18	36

A. 90   **B.** 80   **C.** 70   **D.** 60

6. The ratio of blueberries to raisins in a muffin recipe is 5:3. The table shows equivalent ratios.

If there are 40 blueberries in a batch of muffins, how many raisins are there?

A. 16   **B.** 20   **C.** 22   **D.** 24

Blueberries	Raisins
5	3
10	6
30	18
40	?

7. The ratio of pets to people is 3:13. The table shows equivalent ratios.

If there are 52 people, how many pets are there?

A. 7   **B.** 10   **C.** 12   **D.** 15

Pets	People
3	13
6	26
9	39
?	52

8. The double number line shows the number of miles Jared ran compared with the number of miles Kevin ran.

Jared
0 2 4

Kevin
0 1 2

Which of the following statements are true? *Select all that apply.*

A. For every mile Jared ran, Kevin ran 2 miles.

B. For every 2 miles Jared ran, Kevin ran 1 mile.

C. The ratio of miles Jared ran to miles Kevin ran is $\frac{4}{2}$.

D. The ratio of miles Kevin ran to miles Jared ran is 1:2.

Questions 9–13 are fill-in-the-blank questions. Write the correct answers in the spaces provided on the answer sheet.

9. Ben learns he will earn $30 for working a 2-hour shift. He decides to make a table that shows his earnings based on the work shift he is assigned.

Complete the table to show the money Ben might earn.

Pay, dollars	(a)_____	30	(b)_____	(c)_____
Shift Length, hrs	1	2	3	4

10. The neighborhood coffee house offers several coffee options.
The ratios of tablespoons of coffee to fluid ounces of water are shown below:

A. 4:12　　　　　　　　　**B.** 3:8　　　　　　　　　**C.** 6:24

Using what you know about ratios, order the ratios according to increasing coffee flavor. Remember, a drink will have a stronger coffee flavor if the ratio of coffee to water is greater than another ratio.
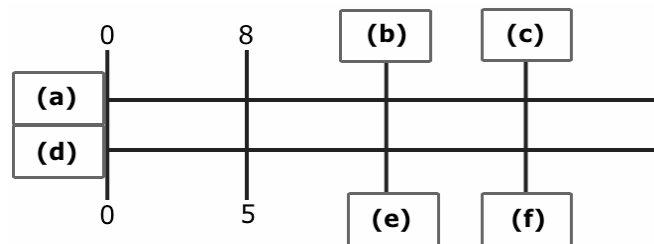
Strong coffee flavor: **(a)**_____

Stronger coffee flavor: **(b)**_____

Strongest coffee flavor: **(c)**_____

11. A flower shop uses ratios to price their flowers. They have decided to sell 8 flowers for $5.00.

Using the double number line diagram, create a representation that shows the relationship of flowers to dollars that this shop uses when setting costs.
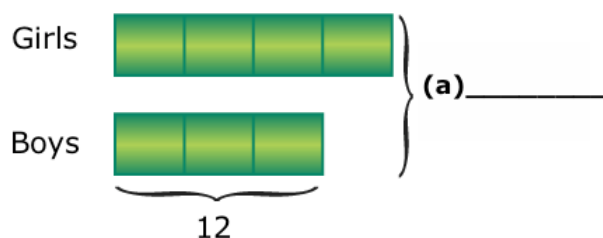
Use the options listed below.

A. flowers　　　　　**B.** 20　　　　　　**C.** 16　　　　　　**D.** 15

E. dollars　　　　　**F.** 10　　　　　　**G.** 12　　　　　　**H.** 24

(a)_____　　　**(b)**_____　　　**(c)**_____

(d)_____　　　**(e)**_____　　　**(f)**_____

12. The number of girls and boys in Ms. Kwan's class is shown in the tape diagram. Based on what you see, determine the ratio of girls to boys and the total number of students in Ms. Kwan's class.

A. 3:4　　　**B.** 4:3　　　**C.** 3:7　　　**D.** 16　　　**E.** 4　　　**F.** 28
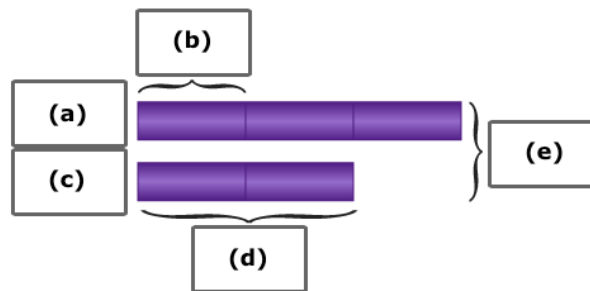

Girls

Boys

}**(a)**_____

12

Ratio: **(b)**_____

13. Mr. Harris decides to ask all of his 30 students if they have pets. He discovers the relationship between students with pets to students without pets is 3:2.

Based on what you know about Mr. Harris' classroom complete the tape diagram. *Use the options listed below.*

A. 5   **B.** 6   **C.** 12   **D.** 18   **E.** 30

F. pets   **G.** no pets

(a)_____   (b)_____

(c)_____   (d)_____   (e)_____

Questions 14 and 15 are graphing questions. Graph the correct answers on the grids provided on the answer sheet.

14. The ratio of counselors to students at a summer camp is 1 to 7.

On the grid on the answer sheet, plot the four pairs of values from the table.

Counselors	Students
1	7
2	14
3	21
4	28

15. Kylie is collecting donated books for her local preschool. Kylie collected books at a rate of 6 per week, as shown in the table.

Kylie continues to collect books at the same rate.

Extend the ratio to week 6. Then, plot the pairs of values from the table to show how many books Kylie collected each week.

On the grid on the answer sheet, plot the four pairs of values from the table.

Week	Number of Donated Books
1	6
2	12
5	30
6	?