Standardized Test

Name _____ Date _____

1. Which table shows an additive relationship?

a.

Muffins sold	1	2	3	4	5
Amount earned (dollars)	4	8	12	16	20

b.

Rectangle width (inches)	1	2	3	4	5
Rectangle length (inches)	5	10	15	20	25

c.

Cups of water	1	2	3	4	5
Tablespoons of drink mix	3	6	9	12	15

d.

Jack's age	1	3	5	7	9
Pat's age	4	6	6	10	12

2. Essam buys 3 apples, 5 bananas, and 7 carrots from a market. What is the ratio of bananas to carrots?

a. 7 to 5
b. 5 to 7
c. 3 to 7
d. 7 to 3

3. The table represents the ratio of tulips to daffodils in a garden.

Tulips	17	?	51	?
Daffodils	12	48	?	60

How many tulips will there be if the garden has 60 daffodils?

a. 36 tulips
b. 60 tulips
c. 68 tulips
d. 85 tulips

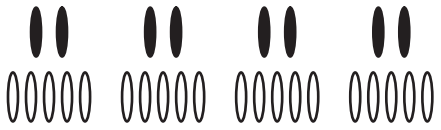
4. Doreen plans to use three more tablespoons of limeade mix today than what she used yesterday to make the same of amount of limeade drink. What is true about today's limeade drink?

a. The mix will have a stronger tasting limeade flavor.
b. The mix will have a weaker tasting limeade flavor.
c. The mix will have the same strength of limeade taste as yesterday.
d. It cannot be determined.

5. Two out of every 7 rubber bands in a multi-colored package are green. Which model would you use to determine the number of rubber bands that will be green in a multi-colored package of 35 rubber bands?

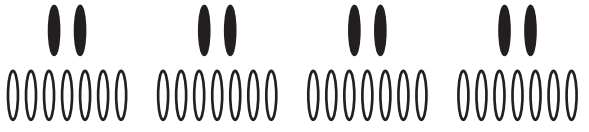
a.

b.

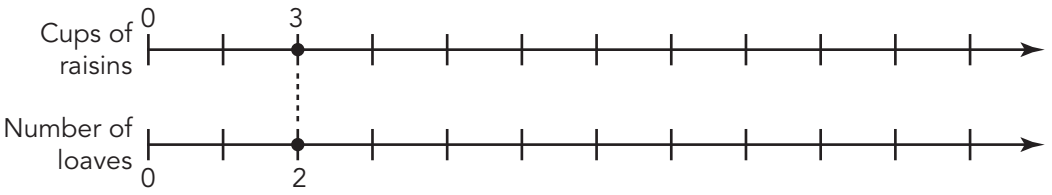


c.

d.



6. Chris is using a double number line to determine the amount of raisins he will use for a raisin bread recipe. If he uses $13\frac{1}{2}$ cups of raisins, how many loaves will he make?



a. 9
b. 10
c. 12
d. 20

7. Of the 45 members of the Henley Middle School Drama Club, 28 are girls. Which is a part-to-part ratio that describes this situation?

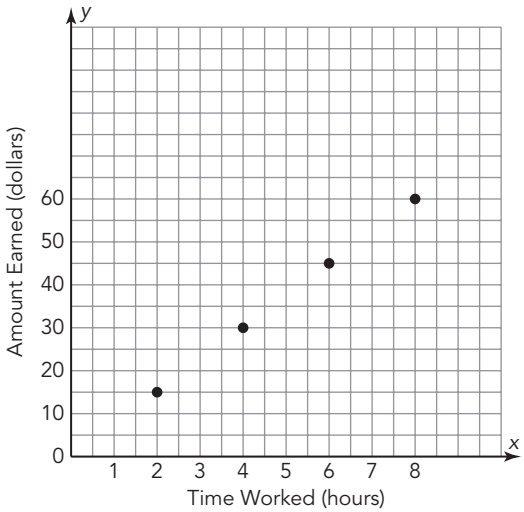
a. $\frac{28 \text{ girls}}{45 \text{ members}}$
b. $\frac{17 \text{ boys}}{45 \text{ members}}$
c. $\frac{45 \text{ members}}{28 \text{ girls}}$
d. $\frac{17 \text{ boys}}{28 \text{ girls}}$

8. If you scale down the ratio on the left, what will you get for the unknown quantity on the right?

$$\frac{434 \text{ miles}}{14 \text{ gallons}} = \frac{?}{2 \text{ gallons}}$$

a. 62 miles
b. 31 miles
c. 124 miles
d. 72 miles

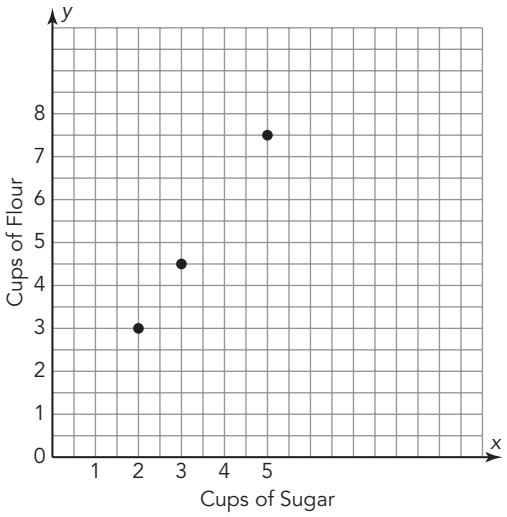
9. Krissa works as a cashier in an office supply store. The graph shows the ratio *amount earned* : *time worked*.



How much will Krissa earn if she works for 6 hours?

a. $35.00
b. $45.00
c. $55.00
d. $65.00

10. The graph represents the number of cups of flour for the number of cups of sugar in a cake recipe.



Which ratio matches the relationship illustrated in the graph?

a. 2 cups of flour : $1\frac{1}{2}$ cups of sugar
b. $2\frac{1}{4}$ cups of flour : $1\frac{1}{2}$ cups of sugar
c. 5 cups of flour : 3 cups of sugar
d. $1\frac{1}{2}$ cups of flour : $2\frac{1}{4}$ cups of sugar

11. There are 32 sixth graders and 44 seventh graders in the video gaming club. Which ratio is the greatest?

a. the ratio of sixth graders to seventh graders

b. the ratio of sixth graders to club members

c. the ratio of club members to sixth graders

d. the ratio of club members to seventh graders

12. Mrs. Boswell is ordering cookies from a bakery for her daughter's eighth grade graduation party. She uses a table to figure out how many cookies to order.

Number of Cookies	?	168	?	?
Number of People	14	28	42	56

Which method would *not* give the correct number of cookies to order if she expects to have 42 people come to the party?

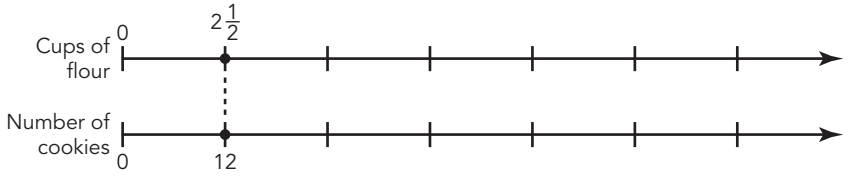
a. Take half the number of cookies needed for 28 people to get the number needed for 14 people. Then triple this number to get the number of cookies needed for 42 people.

b. Double the number of cookies needed for 28 people.

c. Take half the number of cookies needed for 28 people to get the number needed for 14 people. Then multiply this number by 4 to get the number of cookies needed for 56 people. Finally, subtract the number of cookies needed for 14 people from the number needed for 56 people.

d. Take half the number of cookies needed for 28 people to get the number needed for 14 people. Then add the number of cookies needed for 14 people to 168 to get the number of cookies needed for 42 people.

13. Maria is using a double number line to determine the amount of flour she will need to make a batch of sugar cookies. If she wants to make a batch of 48 cookies, how much flour will she need?



a. 5 cups

b. $7\frac{1}{2}$ cups

c. 10 cups

d. $12\frac{1}{2}$ cups

14. If you scale up the ratio on the left, what will you get for the unknown quantity on the right? $\frac{\$155}{20 \text{ hours}} = \frac{\$465}{?}$

a. 10 hours
b. 40 hours
c. 60 hours
d. 100 hours

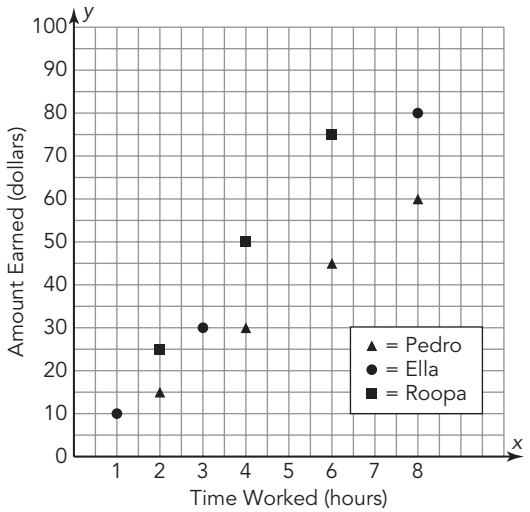
15. A custom shade of purple paint is made by mixing 5 parts of blue paint to 3 parts of red paint. The employees in the paint department of a home improvement store use this table to determine the amounts of blue and red paint needed to create this color for their customers.

Amount of Purple Paint	8 pints	12 pints
Amount of Blue Paint	5 pints	7.5 pints
Amount of Red Paint	3 pints	4.5 pints

How much red paint is needed to make 28 pints of the custom shade of purple paint?

a. 14 pints
b. 10.5 pints
c. 17.5 pints
d. 16.8 pints

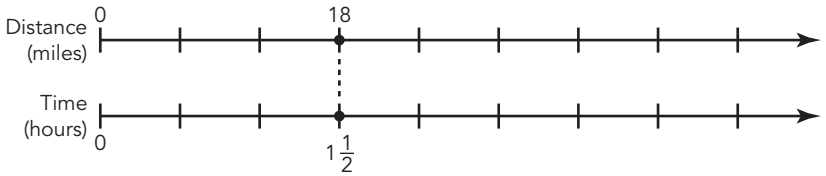
16. Pedro, Ella, and Roopa made a graph to compare how well they are paid on their jobs. The graph shows the ratio *amount earned : hours worked* for each of them.



Which is a true statement? Select all that apply.

a. Roopa is paid at the highest rate.
b. Ella is paid at the lowest rate.
c. They are all paid at the same rate.
d. Roopa's rate is $12.50 per hour.
e. Pedro's rate is $7.50 per hour.

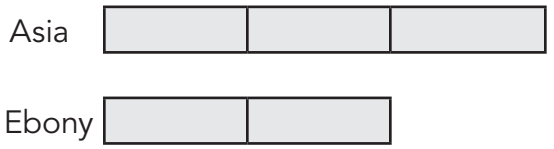
17. The double number line represents the ratio distance : time for a cyclist biking at a constant rate.



Which ratio is equivalent to the cyclist's rate? Select all that apply.

a. 48 miles : 4 hours
b. 30 miles : $2\frac{1}{2}$ hours
c. 20 miles : $1\frac{3}{4}$ hours
d. 10 miles : 1 hour
e. 6 miles : $\frac{1}{2}$ hour

18. Together, Asia and Ebony own 30 books. The tape diagram shows the ratio of *books Asia owns : books Ebony owns*.



Which is a true statement? Select all that apply.

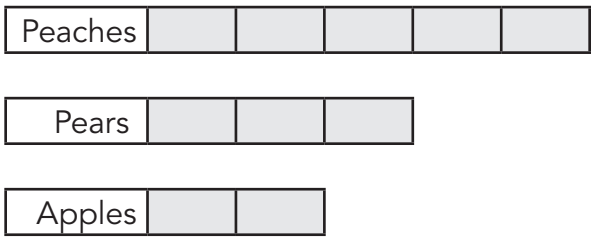
a. Ebony owns 12 books.

b. Asia owns 12 books.

c. Ebony owns 18 books.

d. Asia owns 18 books.

19. A company sells dried fruit in variety trays of peaches, pears, and apples. They always sell the fruit in the ratio of 5 peaches : 3 pears : 2 apples.



Which is a true statement? Select all that apply.

a. In a tray with 20 pieces of fruit, there are 10 peaches.

b. In a tray with 30 pieces of fruit, there are 9 peaches.

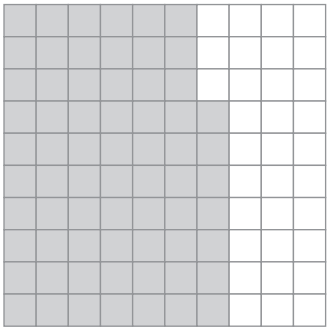
c. In a tray with 40 pieces of fruit, there are 12 pears.

d. In a tray with 50 pieces of fruit, there are 15 apples.

e. In a tray with 60 pieces of fruit, there are 18 pears.

f. In a tray with 80 pieces of fruit, there are 16 apples.

20. The hundredth grid shown represents a whole.



Which is a true statement about the grid? Select all that apply.

a. The ratio of shaded squares to squares that are not shaded is 33 to 67.

b. The ratio of shaded squares to squares that are not shaded is 67 to 33.

c. $\frac{33}{100}$ of the grid is shaded.

d. $\frac{67}{100}$ of the grid is not shaded.

e. 33% of the grid is not shaded.

f. 67% of the grid is shaded.