

# **2015 State Test**

**1**

Which expression could be used to find the total number of circles shown below?



**A**  $2 + 20$

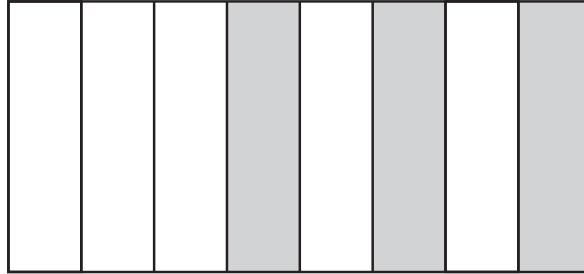
**B**  $2 \times 20$

**C**  $2 + 10$

**D**  $2 \times 10$

**2**

Amar and his friends made a flag for their clubhouse. They divided the flag into equal sections and colored 3 of the sections gray. The flag is shown below.



What fraction of the flag is gray?

- A**  $\frac{1}{3}$
- B**  $\frac{3}{8}$
- C**  $\frac{3}{5}$
- D**  $\frac{5}{8}$

**6**

Alexis read 63 pages of a book in seven days. She read an equal number of pages each day. The equation below can be used to find the total number of pages she read each day.

$$63 \div 7 = \underline{\quad? \quad}$$

What is the total number of pages Alexis read each day?

- A** 8
- B** 9
- C** 56
- D** 70

134030042\_3

**8**

Selena had 204 stamps in her collection. She bought 47 more stamps. If she gave 38 stamps to her brother, how many stamps does Selena have now?

- A** 119
- B** 195
- C** 213
- D** 289

**11**





The tally chart below shows the favorite seasons of Mr. Slater's students.

### OUR FAVORITE SEASONS


Season	Number of Students
Spring	
Summer	/
Fall	
Winter	/

Which picture graph correctly shows the data?





### OUR FAVORITE SEASONS

Season	Number of Students
Spring	
Summer	
Fall	
Winter	


**A**

KEY
 = 2 students





### OUR FAVORITE SEASONS

Season	Number of Students
Spring	
Summer	
Fall	
Winter	


**C**

KEY
 = 2 students





### OUR FAVORITE SEASONS

Season	Number of Students
Spring	
Summer	
Fall	
Winter	


**B**

KEY
 = 2 students

### OUR FAVORITE SEASONS

Season	Number of Students
Spring	
Summer	
Fall	
Winter	

**D**

KEY
 = 2 students

144030038\_3

**13**

What is 637 rounded to the nearest ten?

- A** 600
- B** 630
- C** 640
- D** 647

**14**

Nadia was working on a math problem. She was asked to shade parts of the figure so that  $\frac{5}{6}$  of the figure below was shaded.



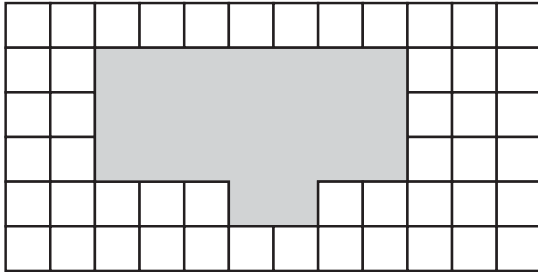
What should Nadia do to complete the math problem?


- A** Nadia should shade two more parts of the figure.
- B** Nadia should shade three more parts of the figure.
- C** Nadia should shade four more parts of the figure.
- D** Nadia should shade five more parts of the figure.



**16**

What is the area, in square units, of the shaded shape on the grid below?

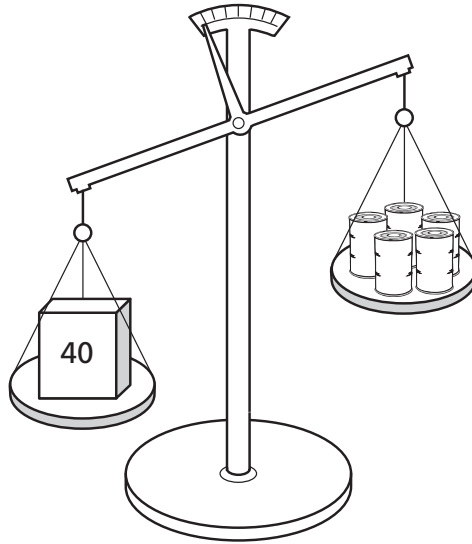


KEY	
	= 1 square unit

- A** 22
- B** 23
- C** 28
- D** 72

**17**

The picture below shows that one box is heavier than 5 identical cans.






The box has a mass of 40 kilograms. What could be the mass, in kilograms, of 1 can?

- A** 40
- B** 10
- C** 8
- D** 6

**20**

Mr. Stone asked each of his students to name one favorite hobby. He made the picture graph shown below to display the data.

### STUDENTS' FAVORITE HOBBIES

Hobby	Number of Students
Drawing	
Reading	
Sports	

KEY
 = 2 students

Which table represents the same data as the picture graph?

**A**

STUDENTS' FAVORITE HOBBIES	
Hobby	Number of Students
Drawing	4
Reading	6
Sports	8

**C**

STUDENTS' FAVORITE HOBBIES	
Hobby	Number of Students
Drawing	2
Reading	3
Sports	4

**B**

STUDENTS' FAVORITE HOBBIES	
Hobby	Number of Students
Drawing	8
Reading	6
Sports	4

**D**

STUDENTS' FAVORITE HOBBIES	
Hobby	Number of Students
Drawing	4
Reading	5
Sports	6

134030032\_1

**25**

Which expression has the same value as  $(8 \times 5) + (8 \times 3)$ ?

**A**  $8 \times 8$

**B**  $8 \times 15$

**C**  $16 + 8$

**D**  $13 + 11$

134030020\_3

**28**

Alex sorted 20 toy cars into 4 groups with the same number of cars in each group. Which expression represents the number of toy cars in each group?

**A**  $20 \times 4$

**B**  $20 + 4$

**C**  $20 \div 4$

**D**  $20 - 4$

144030025\_1

**30**

A certain dance class has 42 dancers. The teacher wants to place the class into six equal groups. Which number sentence could be used to find the number of dancers that will be in each group?

**A**  $6 \times \underline{\quad? \quad} = 42$

**B**  $6 \div \underline{\quad? \quad} = 42$

**C**  $42 + 6 = \underline{\quad? \quad}$

**D**  $42 - 6 = \underline{\quad? \quad}$

144030044\_3

**31**

Noel read 90 minutes each day for 6 days. Tyra read 60 minutes each day for 8 days. What is the difference, in minutes, between the total amount of time Noel read and the total amount of time Tyra read?

- A** 30
- B** 40
- C** 60
- D** 80

144030011\_1

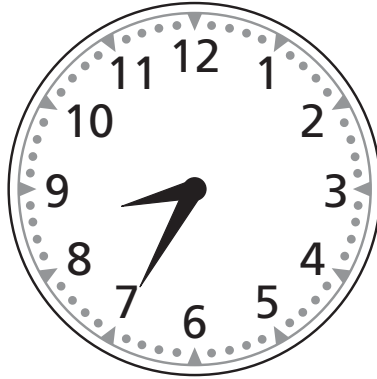
**32**

Mr. Bachu bought 24 pounds of potting soil. Which sentence could describe the potting soil Mr. Bachu bought?

- A** He bought 6 bags that weigh 4 pounds each.
- B** He bought 5 bags that weigh 4 pounds each.
- C** He bought 4 bags that weigh 20 pounds each.
- D** He bought 10 bags that weigh 14 pounds each.

**33**

Pedro left home this morning at the time shown on the clock below.



Tina left home 20 minutes after Pedro left. Carlos left home 18 minutes after Tina left. At what time did Carlos leave home this morning?

- A** 7:57 a.m.
- B** 8:13 a.m.
- C** 8:38 a.m.
- D** 9:13 a.m.

**34**

Mrs. Allen made 8 pitchers of fruit punch for a party. She used 2 liters of water to make each pitcher of fruit punch. How many liters of water did Mrs. Allen use in all?

- A** 4
- B** 6
- C** 10
- D** 16



**37**

The table below shows the number of tickets for the school play that were sold each day.

### SCHOOL PLAY TICKETS

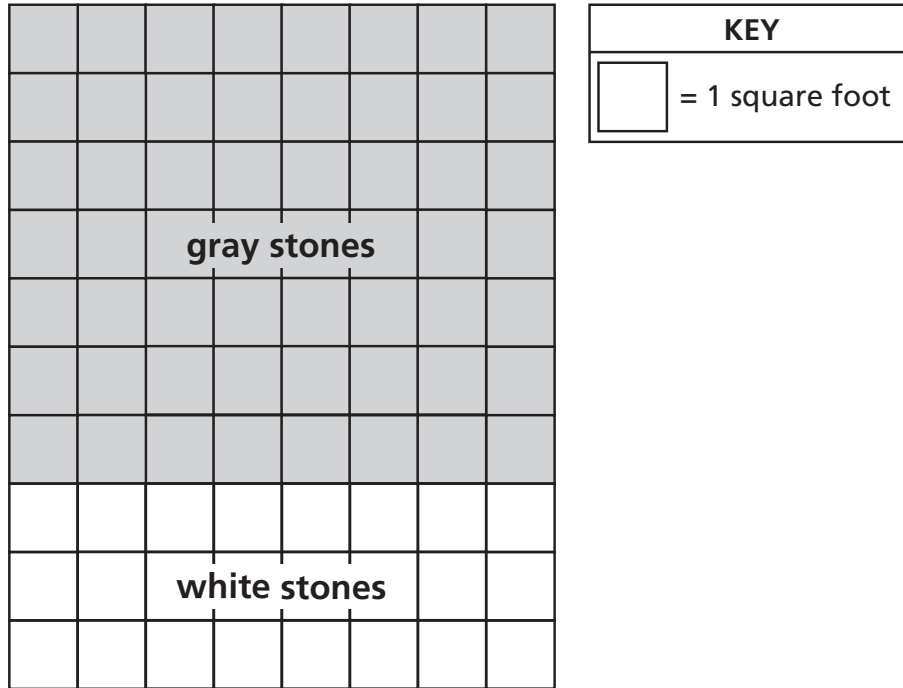
Day	Number of Tickets Sold
Thursday	238
Friday	361
Saturday	249
Sunday	328

On which day does the number of tickets sold round to 300, when rounded to the nearest hundred?

- A** Thursday
- B** Friday
- C** Saturday
- D** Sunday

**38**

Paul has gray and white paving stones in his patio. A diagram of his patio is shown below.

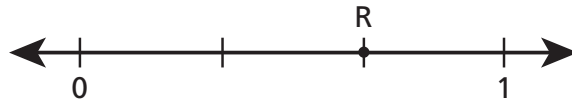


Which equation can be used to find the total area, in square feet, of Paul's patio?

- A**  $(8 \times 7) + (8 \times 3) = \underline{\quad? \quad}$
- B**  $(8 + 7) \times (8 + 3) = \underline{\quad? \quad}$
- C**  $(10 \times 7) + (10 \times 3) = \underline{\quad? \quad}$
- D**  $(10 + 7) \times (10 + 3) = \underline{\quad? \quad}$

**39**

Which fraction represents the location of point R on the number line below?



**A**  $\frac{1}{3}$

**B**  $\frac{2}{4}$

**C**  $\frac{2}{3}$

**D**  $\frac{3}{4}$

**40**

The school store sells pencils in packages of 4. Zoe bought enough packages to have 28 pencils. The equation below can be used to determine the number of packages Zoe bought.

$$4 \times \underline{\quad?} = 28$$

What is the total number of packages that Zoe bought?

- A** 6
- B** 7
- C** 24
- D** 32

**45**

Rick has 15 muffins. He will give each of his three children one muffin each day. The equation below can be used to find the total number of days he can give the muffins to his children before they are gone.

$$15 \div \underline{\quad?} = 3$$

What is the total number of days Rick can give the muffins to his children?

- A** 4
- B** 5
- C** 12
- D** 18

134030038\_4

**47**

Which number sentence could also be used to find the missing number in the equation  $10 \times \underline{\quad ? \quad} = 60$ ?

**A**  $60 \times 10 = \underline{\quad ? \quad}$

**B**  $60 - 10 = \underline{\quad ? \quad}$

**C**  $60 + 10 = \underline{\quad ? \quad}$

**D**  $60 \div 10 = \underline{\quad ? \quad}$

134030058\_3

**48**

Which number sentence is true?

**A**  $\frac{2}{2} = \frac{2}{6}$

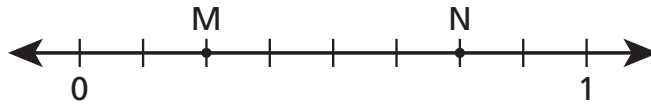
**B**  $\frac{4}{6} = \frac{2}{2}$

**C**  $\frac{1}{2} = \frac{3}{6}$

**D**  $\frac{2}{6} = \frac{1}{2}$

**49**

On the number line below, the distance from 0 to 1 represents a whole.



What fraction of the whole represents the distance from point M to point N?

**Answer** \_\_\_\_\_

Complete the number line below so that each part represents  $\frac{1}{4}$  of the distance from 0 to 1.



**50**

An art teacher is planning a painting project for her classes. She made the table below to show how much paint she would need for each class.

**PAINT FOR ONE CLASS**

Color	Amount Needed (pints)
Red	4
Yellow	2
Blue	3

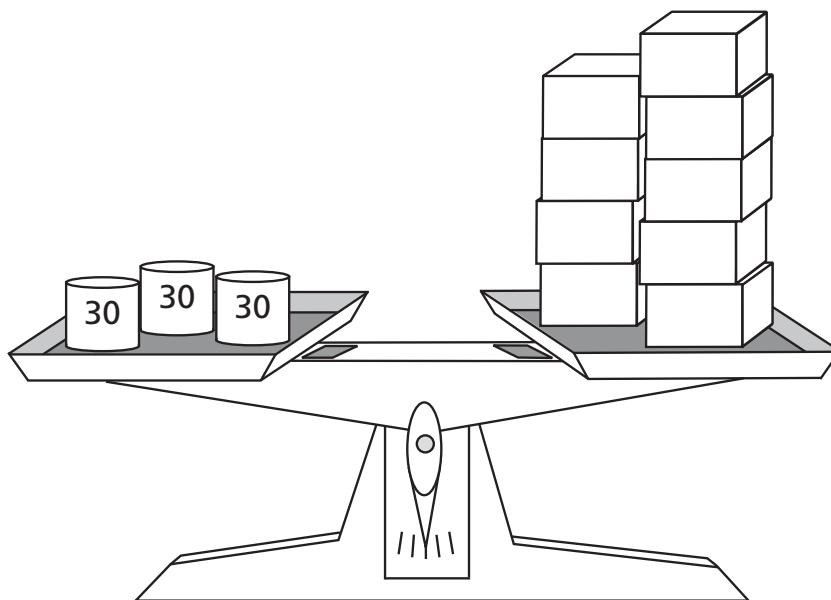
What is the total number of pints of paint that will be needed for her five classes?

**Show your work.**

**Answer** \_\_\_\_\_ pints



- 51** The picture below shows that 3 cans have the same mass as 9 identical boxes. Each can has a mass of 30 grams.



What is the mass, in grams, of each box?

**Show your work.**

**Answer** \_\_\_\_\_ grams

**52**

Ryan played a computer game three times. His score on each of the first two games is shown in the table below.

### COMPUTER GAME SCORES

Game	Ryan	
1	215	
2	225	
3		
	714	<b>Total</b>

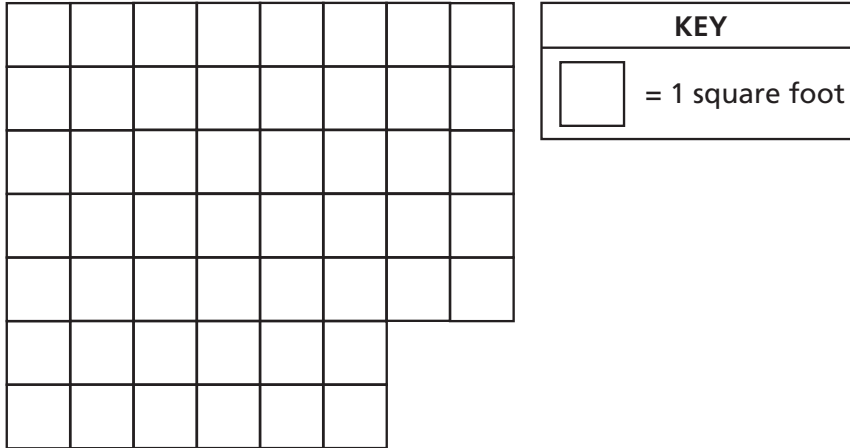
Ryan's total score for all 3 games was 714. What was Ryan's score in game 3?

**Show your work.**

**Answer** \_\_\_\_\_

**53**

Ms. Chen tiled her kitchen and bathroom floors. The total area of **both** floors she tiled was 92 square feet. The diagram below shows the tiles on the kitchen floor.

**KITCHEN FLOOR**

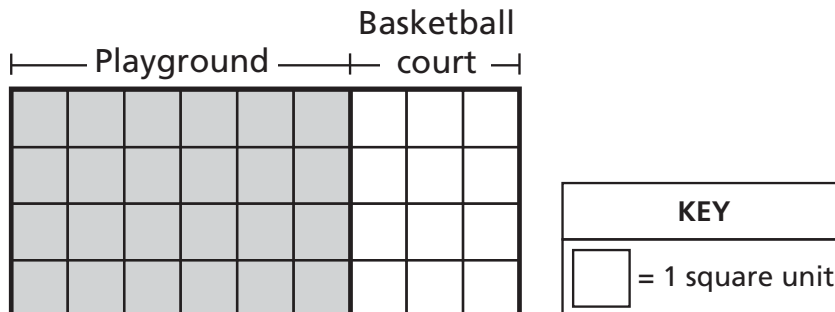
What is the area, in square feet, of the bathroom floor?

**Show your work.**

**Answer** \_\_\_\_\_ square feet

**55**

The grid below shows a playground and a basketball court at a park.



What is the area of the playground?

**Answer** \_\_\_\_\_ square units

What is the total area of both the playground and the basketball court?

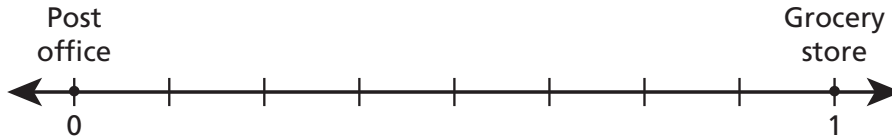
**Answer** \_\_\_\_\_ square units

Fill in the blanks to show how the number sentence below can be used to find the total area of the playground and the basketball court.

**Answer**  $(4 \times \underline{\quad}) + (4 \times \underline{\quad}) = 4 \times (\underline{\quad} + \underline{\quad})$

**56**

Amy and Barney live on a road between the post office and the grocery store. The post office and the grocery store are 1 mile apart. The road is represented by the number line below.



- Amy lives  $\frac{2}{8}$  mile from the post office.
- Barney lives  $\frac{3}{8}$  mile from Amy's house.

Draw and label points for Amy's house and Barney's house on the number line. Use labels A for Amy and B for Barney.

How far does Barney live from the post office?

**Answer** \_\_\_\_\_ mile