

**Hardyston Middle School
183 Wheatsworth Road
Hamburg, N.J. 07419
(973) 823-7000**

Dear Parents and Guardians:

In order to succeed at mastering a skill, a person must practice. For example, both musicians and athletes practice on a regular basis. The same is true for a student. Although students need and deserve some "down time", a great deal of information can be forgotten during summer vacation.

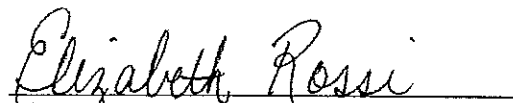
By fostering a positive approach to the completion of this math packet, you will help your child learn and retain important math skills and concepts. Your cooperation in assuring that the summer work is completed will contribute to your child's future success in school.

The questions in the math packet follow the Common Core Curriculum for 5th grade math. While most students should be able to complete the pages independently, some students may need help in managing their time. In addition, we have provided a Mathematics Reference Sheet should your child need it.

Students are expected to finish the entire packet. They should bring the completed packet with them on the first day of school. It will not be accepted past September 12th. If the math packet is completed, it will count for five extra credits points towards a test or quiz. Please don't use a calculator and attach all work with the packet.

Mrs. Eberding and I are looking forward to teaching our new 5th graders! We know it is going to be a great year. Have a wonderful summer.

Sincerely,

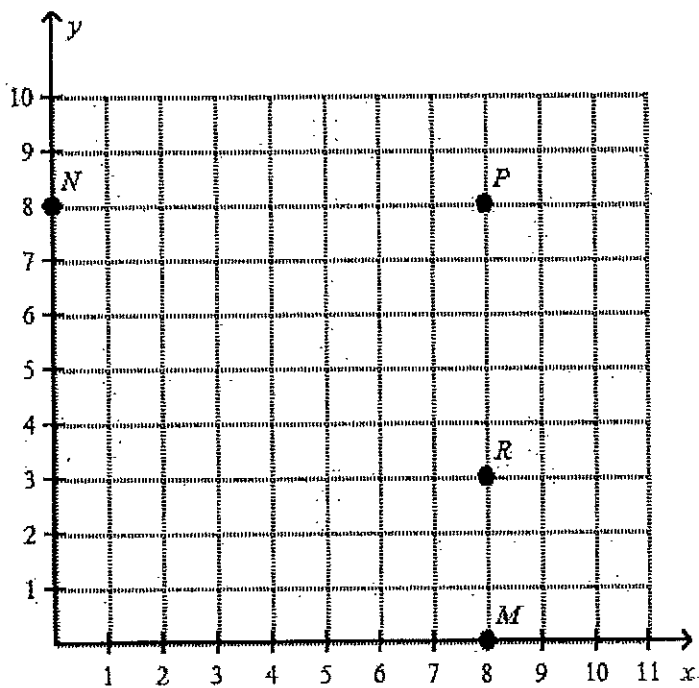

Elizabeth Rossi

E. Rossi - Math Packet Grade 5

Indicate the answer choice that best completes the statement or answers the question.

Solve.

- ___ 1. Locate and name the point at $(8, 0)$.

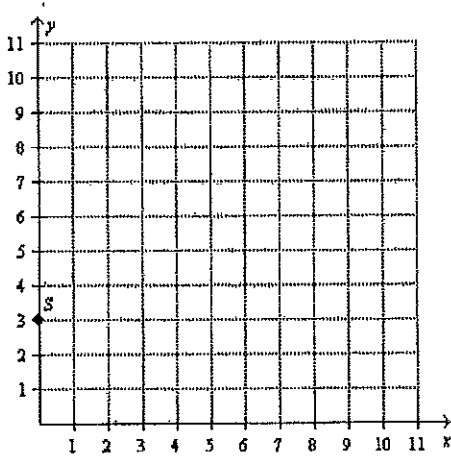


- a. N b. P
- c. R d. M

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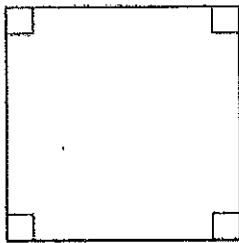
___ 2. Locate and name the ordered pair for the point shown.



- a. $S(2, 3)$
- b. $S(3, 0)$
- c. $S(4, 0)$
- d. $S(0, 3)$

Classify the quadrilateral based on its attributes.

___ 3.

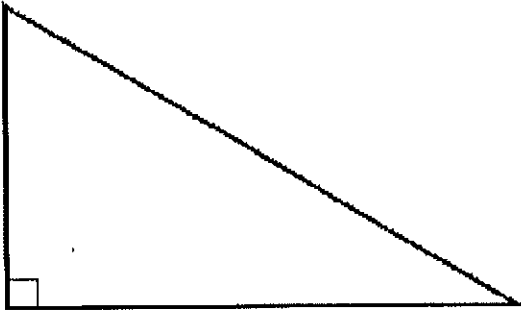


- a. rectangle
- b. rhombus
- c. square
- d. parallelogram

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Classify the triangle based on its angles.

___ 4.



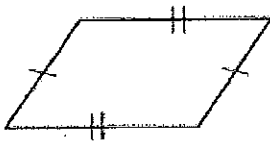
- a. acute
- b. obtuse
- c. equilateral
- d. right

___ 5. Which quadrilateral has no right angles?

- a. square
- b. rhombus
- c. rectangle
- d. none of the above

Classify the quadrilateral based on its attributes.

___ 6.



- a. trapezoid
- b. rhombus
- c. parallelogram
- d. square

___ 7.



- a. trapezoid
- b. rectangle
- c. parallelogram
- d. rhombus

___ 8. Which quadrilateral has exactly one pair of opposite sides parallel?

- a. trapezoid
- b. square
- c. rhombus
- d. parallelogram

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Describe the attributes of the quadrilateral. Then classify the quadrilateral based on its attributes.

___ 9.



- a. All sides are congruent. Opposite sides are parallel; rhombus
- b. One pair of opposite sides is congruent. One pair of opposite sides is parallel; trapezoid
- c. Opposite sides are congruent and parallel. There are 4 right angles; rectangle
- d. Opposite sides are congruent and parallel; parallelogram

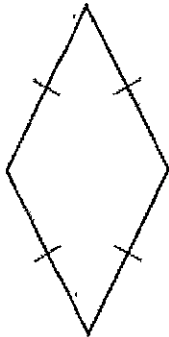
___ 10.



- a. Opposite sides are congruent and parallel; parallelogram
- b. Opposite sides are congruent and parallel. There are 4 right angles; rectangle
- c. One pair of opposite sides is congruent. One pair of opposite sides is parallel; trapezoid
- d. All sides are congruent. Opposite sides are parallel. There are 4 right angles; square.

Classify the quadrilateral based on its attributes.

___ 11.

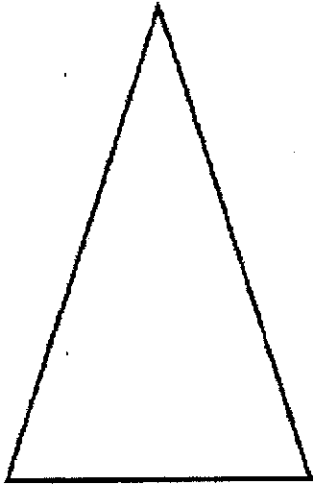


- a. rectangle
- b. square
- c. parallelogram
- d. rhombus

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Classify the triangle based on its angles.

___ 12.



- a. scalene b. right
- c. obtuse d. acute

Write the number in expanded form.

___ 13. 0.488

- a. $4 \times 1 + \left(8 \times \frac{1}{10}\right) + \left(8 \times \frac{1}{100}\right)$
- b. $4 \times 1 + \left(8 \times \frac{1}{100}\right) + \left(8 \times \frac{1}{1,000}\right)$
- c. $\left(4 \times \frac{1}{10}\right) + \left(8 \times \frac{1}{100}\right) + \left(8 \times \frac{1}{1,000}\right)$
- d. $4 \times 1 + \left(88 \times \frac{1}{1,000}\right)$

___ 14. 15.602

- a. $1 \times 10 + 5 \times 1 + \left(6 \times \frac{1}{10}\right) + \left(2 \times \frac{1}{1,000}\right)$
- b. $1 \times 10 + 5 \times 1 + \left(6 \times \frac{1}{10}\right) + \left(2 \times \frac{1}{100}\right)$
- c. $1 \times 100 + 5 \times 10 + \left(6 \times \frac{1}{100}\right) + \left(2 \times \frac{1}{1,000}\right)$
- d. $1 \times 100 + 5 \times 1 + \left(6 \times \frac{1}{10}\right) + \left(2 \times \frac{1}{100}\right)$

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___ 15. 3.98

a. $3 \times 1 + \left(9 \times \frac{1}{10}\right) + \left(8 \times \frac{1}{1,000}\right)$

b. $3 \times 1 + \left(9 \times \frac{1}{10}\right) + \left(8 \times \frac{1}{100}\right)$

c. $\left(3 \times \frac{1}{10}\right) + \left(9 \times \frac{1}{100}\right) + \left(8 \times \frac{1}{1,000}\right)$

d. $3 \times 1 + \left(9 \times \frac{1}{100}\right) + \left(9 \times \frac{1}{10}\right)$

___ 16. 85.1

a. $8 \times 10 + 5 \times 1 + \left(1 \times \frac{1}{1,000}\right)$

b. $\left(8 \times \frac{1}{10}\right) + \left(5 \times \frac{1}{100}\right) + \left(1 \times \frac{1}{1,000}\right)$

c. $8 \times 1 + \left(5 \times \frac{1}{10}\right) + \left(1 \times \frac{1}{100}\right)$

d. $8 \times 10 + 5 \times 1 + \left(1 \times \frac{1}{10}\right)$

___ 17. 10.5

a. $1 \times 10 + 5 \times 1$ b. $1 \times 10 + \left(5 \times \frac{1}{10}\right)$

c. $1 \times 1 + \left(5 \times \frac{1}{10}\right)$ d. $1 \times 10 + 5 \times 1$

Find the unknown in each equation and choose the property you used.

___ 18. $\square \times 100 = 1,000$

a. 100; Zero Property b. 100; Identity Property

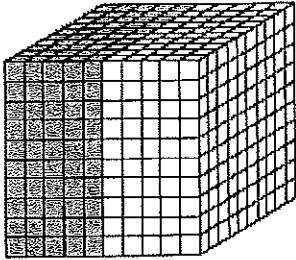
c. 10; Identity Property d. 10; Associative Property

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What is a fraction and a decimal for the part that is shaded gray?

___ 19.



- a. $\frac{500}{1,000}$, 0.05 b. $\frac{50}{1,000}$, 0.5
c. $\frac{500}{1,000}$, 0.5 d. $\frac{50}{1,000}$, 0.05

What is the fraction as a decimal?

___ 20. $\frac{1}{1,000}$

- a. 0.01 b. 0.001
c. 1.0 d. 0.10

___ 21. $\frac{7}{10}$

- a. 7.0 b. 0.7
c. 0.07 d. 0.007

___ 22. $\frac{58}{100}$

- a. 0.58 b. 0.058
c. 58.0 d. 5.80

___ 23. $\frac{507}{1,000}$

- a. 5.07 b. 0.507
c. 507.0 d. 50.70

___ 24. $\frac{68}{100}$

- a. 0.68 b. 0.068
c. 68.0 d. 6.80

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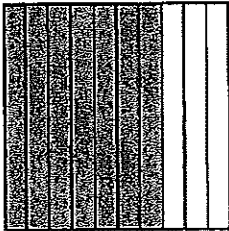
- 25. $\frac{20}{100}$
a. 0.20 b. 0.020
c. 20.0 d. 2.00

- 26. $\frac{1}{10}$
a. 1.0 b. 0.1
c. 0.01 d. 0.001

- 27. $\frac{476}{1,000}$
a. 4.76 b. 0.476
c. 476.0 d. 47.60

What is a fraction and a decimal for the part that is shaded gray?

— 28.



- a. $\frac{7}{10}$, 0.7 b. $\frac{7}{100}$, 0.07
c. $\frac{7}{10}$, 7.0 d. $\frac{7}{10}$, 0.007

What is the fraction as a decimal?

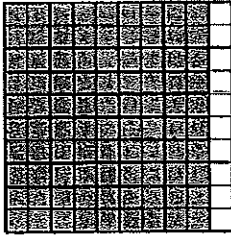
- 29. $\frac{54}{100}$
a. 0.54 b. 0.054
c. 54.0 d. 5.40

- 30. $\frac{62}{1,000}$
a. 0.62 b. 0.062
c. 62.0 d. 6.20

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What is a fraction and a decimal for the part that is shaded gray?

___ 31.



- a. $\frac{90}{100}$, 0.90 b. $\frac{9}{100}$, 0.09
 c. $\frac{90}{100}$, 0.09 d. $\frac{9}{100}$, 0.90

What is the fraction as a decimal?

___ 32. $\frac{395}{1,000}$

- a. 3.95 b. 0.395
 c. 395.0 d. 39.50

___ 33. $\frac{61}{1,000}$

- a. 0.61 b. 0.061
 c. 61.0 d. 6.10

___ 34. $\frac{773}{1,000}$

- a. 7.73 b. 0.773
 c. 773.0 d. 77.30

___ 35. $\frac{720}{1,000}$

- a. 7.20 b. 0.720
 c. 720.0 d. 72.00

___ 36. $\frac{80}{1,000}$

- a. 0.80 b. 0.080
 c. 80.0 d. 8.00

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___ 37. $\frac{4}{10}$

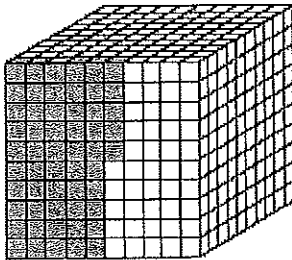
- a. 4.0 b. 0.4
c. 0.04 d. 0.004

___ 38. $\frac{5}{10}$

- a. 5.0 b. 0.5
c. 0.05 d. 0.005

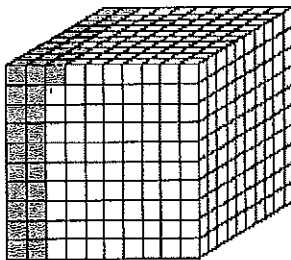
What is a fraction and a decimal for the part that is shaded gray?

___ 39.



- a. $\frac{55}{1,000}$, 0.055 b. $\frac{55}{1,000}$, 0.55
c. $\frac{55}{100}$, 0.055 d. $\frac{550}{1,000}$, 0.055

___ 40.



- a. $\frac{203}{1,000}$, 0.023 b. $\frac{23}{1,000}$, 0.203
c. $\frac{203}{1,000}$, 0.203 d. $\frac{203}{100}$, 0.203

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Estimate the product.

___ 43. $\$22.29$
 $\times \underline{5}$

- a. \$150 b. \$103.44
c. \$200 d. \$100

___ 44. $\$15.39 \times 5 =$

- a. \$200 b. \$105.11
c. \$100 d. \$150

Estimate by rounding.

___ 45. 236
 $\times \underline{8}$

- a. 4,700 b. 1,600
c. 3,400 d. 4,800

___ 46. 683
 $\times \underline{6}$

- a. 4,200 b. 7,400
c. 5,600 d. 13,600

___ 47. 47×926

- a. 55,800 b. 45,300
c. 45,000 d. 42,300

___ 48. 338
 $\times \underline{4}$

- a. 2,900 b. 4,200
c. 1,200 d. 3,400

___ 49. 972
 $\times \underline{5}$

- a. 5,000 b. 8,200
c. 6,400 d. 19,400

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- ___ 50. 48×721
a. 33,600 b. 43,200
c. 35,000 d. 35,300

- ___ 51. 47×696
a. 42,000 b. 35,000
c. 34,700 d. 32,900

- ___ 52. 22×763
a. 22,800 b. 16,000
c. 17,600 d. 15,700

- ___ 53. 340
 $\times 9$
a. 2,700 b. 5,900
c. 4,600 d. 6,800

- ___ 54. 600
 $\times 6$
a. 5,100 b. 6,900
c. 3,600 d. 12,000

Divide.

- ___ 55. $803 \div 63$
a. 4 R47 b. 28 R47
c. 12 R47 d. 18 R47

- ___ 56. $817 \div 16$
a. 57 R1 b. 51 R1
c. 60 R1 d. 47 R1

Solve each problem by solving a simpler problem.

- ___ 57. Brandon earned a total of 3,618 points on quizzes throughout the school year. He earned about 90 points on each quiz. The school year is divided into 4 quarters with the same number of quizzes given each quarter. About how many quizzes did Brandon take during the first quarter of the year?
a. 10 quizzes b. 12 quizzes
c. 22 quizzes d. 904 quizzes

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Divide.

___ $58.20 \overline{)614}$

- a. 34 R14 b. 30 R14
c. 36 R14 d. 20 R14

___ $59.22 \overline{)562}$

- a. 33 R12 b. 24 R12
c. 26 R12 d. 25 R12

Solve each problem by solving a simpler problem.

___ 60. Karin watched television 630 minutes last week. She watched the same amount all seven days. How many total minutes of television did she watch on Friday and Saturday?

- a. 30 minutes b. 60 minutes
c. 90 minutes d. 180 minutes

Divide.

___ $61.16 \overline{)797}$

- a. 61 R13 b. 55 R13
c. 48 R13 d. 49 R13

___ $62.67 \overline{)694}$

- a. 10 R24 b. 24 R24
c. 2 R24 d. 16 R24

Find the unknown in each equation and choose the property you used.

___ 63. $15.7 \times \square = 15.7$

- a. 1; Commutative Property b. 10; Identity Property
c. 0; Zero Property d. 1; Identity Property

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___ 64. $12.8 \times (\square \times 9.2) = (12.8 \times 7.5) \times 9.2$

- a. 7.5; Commutative Property b. 12.8; Associative Property
c. 12.8; Commutative Property d. 7.5; Associative Property

___ 65. $6.3 \times (5.2 \times 3) = (6.3 \times \square) \times 3$

- a. 5.2; Commutative Property b. 5.2; Associative Property
c. 3; Associative Property d. 6.3; Commutative Property

Use properties of multiplication to find each product mentally.

___ 66. $2.6 \times (9 \times 3)$

- a. 66.2 b. 14.6
c. 70.2 d. 74.2

___ 67. Jeremy's car used 12 gallons of gasoline in one week. If Jeremy drove the same distance each day, how much gasoline did his car use in one day?

- a. $\frac{12}{5}$ gallons b. $\frac{5}{12}$ gallon
c. $\frac{7}{12}$ gallon d. $\frac{12}{7}$ gallons

___ 68. Marty bought five gallons of paint to paint four equal size rooms. How much paint is needed for each room?

- a. $\frac{5}{4}$ or $1\frac{1}{4}$ gallons b. $\frac{4}{5}$ gallon
c. $\frac{5}{2}$ or $2\frac{1}{2}$ gallons d. $\frac{4}{2}$ or 2 gallons

___ 69. Alex ordered six pizzas for 23 guests. Each guest ate the same amount of pizza. How much pizza did each guest eat?

- a. $\frac{23}{6}$ or $3\frac{5}{6}$ pizzas b. $\frac{6}{23}$ pizza
c. $\frac{17}{23}$ pizza d. $\frac{23}{17}$ or $1\frac{5}{17}$ pizzas

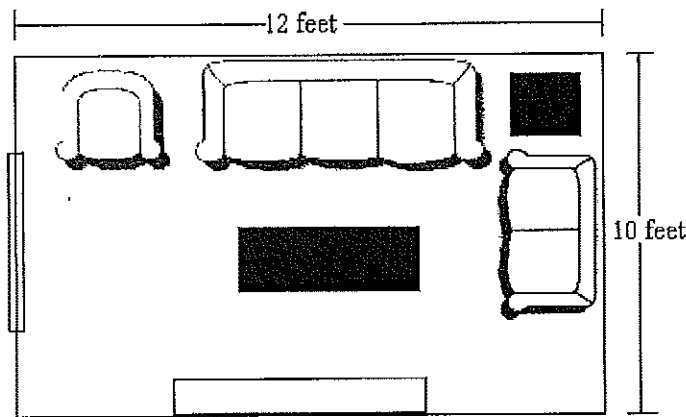
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___ 70. Two cups of flour are used to make a batch of 12 cookies. How much flour is used for each cookie?

- a. $\frac{1}{12}$ cup b. $\frac{2}{12}$ or $\frac{1}{6}$ cup
c. $\frac{12}{2}$ or 6 cups d. 4 cups

Solve.

___ 71. The diagram below shows the dimensions of Sandy's living room. She plans to put crown molding around the perimeter of the ceiling. How many feet of crown molding does Sandy need?



- a. 24 feet b. 20 feet
c. 44 feet d. 22 feet

___ 72. Reading Rocks book store is having a sale. Books are 2 for \$10 plus \$0.50 in tax for each book. How much will 12 books cost?

- a. \$63 b. \$50
c. \$66 d. \$126

___ 73. Selena is making 4 decorative crates. Each crate has a front side in the shape of a square. The length of the front of the crate is 5 inches. She plans to cover the front of the crates with patterned contact paper. How many inches of contact paper will Selena need?

- a. 80 inches b. 20 inches
c. 60 inches d. 40 inches

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___ 74. Mina drew tally marks for the number of cars that drove by her house during the day. She drew 9 groups of five and 1 group of 4. How many cars drove by Mina's house?

- a. 54 b. 39
- c. 44 d. 49

___ 75. Deidre read 5 books over summer break. Peyton read 4 times the amount of books that Deidre read. How many books did Peyton read?

- a. 16 b. 18
- c. 14 d. 20

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Fractions

Indicate the answer choice that best completes the statement or answers the question.

Complete.

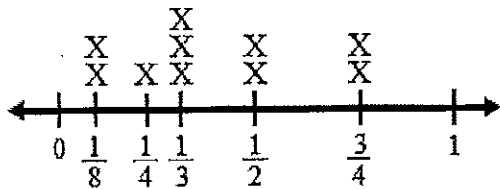
- ___ 1. 5 qt = gal qt
a. 10; 1 b. 1; 0
c. 1; $\frac{1}{2}$ d. 1; 1

- ___ 2. 23 qt = c
a. 184 b. 46
c. 230 d. 92

3. Describe how to find the fair share, in feet, of a line plot that is graphed using inches.

Refer to the line plot below to answer the question.

Vehicle weights (T)



4. Which weight(s) occurs the most often?

Fractions

Indicate the answer choice that best completes the statement or answers the question.

Determine a reasonable answer to solve each problem.

- ___ 5. Mallory spent \$18.23 on paint, \$7.24 on a brush, and \$9.67 on canvas. Which is the most reasonable estimate for the total that she spent on art supplies?
- a. \$34 b. \$35
c. \$36 d. \$37

- ___ 6. Alok bought a game for \$9.78, a toy for \$6.34, and a sandwich for \$4.91. If he started with \$30, about how much money does he have left?
- a. \$9 b. \$10
c. \$11 d. \$12

Solve the problem by using logical reasoning.

- ___ 7. Shannon has \$1.57 in quarters, dimes, and pennies. She has 5 times as many dimes as quarters. She has 5 more pennies than quarters. How many of each coin does she have?
- a. 1 quarter, 5 dimes, 82 pennies b. 1 quarter, 5 dimes, 6 pennies
c. 2 quarters, 10 dimes 15 pennies d. 2 quarters, 10 dimes 7 pennies

Determine a reasonable answer to solve each problem.

8. Quinn bought a tennis racquet for \$24.74. He bought a can of tennis balls for \$2.87. About how much did Quinn spend altogether? Explain.

9. Trisha ate $\frac{1}{4}$ of the pizza and Drew ate $\frac{3}{8}$ of the pizza. What fraction of the pizza did they eat?

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Fractions

Indicate the answer choice that best completes the statement or answers the question.

Subtract. Write the answer in simplest form.

— 10. $\frac{5}{18} - \frac{2}{9}$

a. $\frac{1}{9}$ b. $\frac{3}{9}$

c. $\frac{5}{81}$ d. $\frac{1}{18}$

11. Danielle drank $58\frac{2}{9}$ ounces of water on Monday, $64\frac{1}{3}$ ounces on Tuesday, and $49\frac{4}{9}$ ounces on Friday. How much more water did she drink on Monday and Tuesday than on Friday? Write an expression and solve for the answer.

12. Jenny had a roll of ribbon that contained $\frac{5}{6}$ foot of ribbon. She used $\frac{4}{6}$ foot of ribbon to decorate a present. How much ribbon was left on the roll?

13. Find $\frac{5}{8}$ of 26. Write the product in simplest form.

Fractions

Indicate the answer choice that best completes the statement or answers the question.

Multiply. Find the product in simplest form.

___ 14. $\frac{4}{7} \times \frac{7}{8}$

a. $\frac{28}{56}$ b. $\frac{11}{15}$

c. $\frac{1}{2}$ d. $\frac{11}{56}$

Solve each problem by drawing a diagram.

___ 15. Wes and his friends are playing miniature golf. The round of golf for all of them originally costs \$48, but Wes has a coupon for $\frac{1}{4}$ off the total price. How much money does the coupon save them altogether?

- a. \$6 b. \$8
c. \$10 d. \$12

___ 16. Estimate the product by rounding each fraction to 0, $\frac{1}{2}$, or 1.

$\frac{4}{5} \times \frac{3}{5}$

a. $\frac{1}{4}$ b. 0

c. $\frac{1}{2}$ d. 1

Enter the appropriate word(s) to complete the statement.

17. Nadine scores a basket $\frac{1}{3}$ of the time she shoots at the basketball hoop. If she shoots at the hoop 25 times during a game, about how many baskets will she score? Estimate using compatible numbers.

Fractions

18. The table shows some ingredients in a tuna casserole.

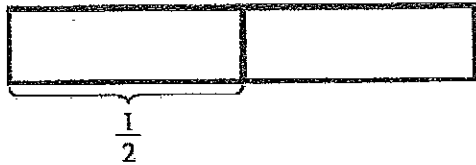
Tuna	Cooked noodles	Shredded cheese
$1\frac{2}{3}$ cup	$3\frac{1}{4}$ cups	$\frac{3}{4}$ cup

If you make 4 times the recipe, how many cups of cooked noodles are needed?

Indicate the answer choice that best completes the statement or answers the question.

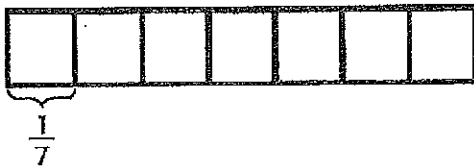
Find each quotient. Use each model. Check using multiplication.

___ 19. $\frac{1}{2} \div 4$



- a. $\frac{1}{4}$
- b. $\frac{1}{6}$
- c. $\frac{1}{8}$
- d. $\frac{1}{10}$

___ 20. $\frac{1}{7} \div 3$



- a. $\frac{1}{14}$
- b. $\frac{1}{21}$
- c. $\frac{1}{28}$
- d. $\frac{1}{35}$

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Fractions

Draw a model to solve the problem.

21. Ramon and his friends have rented an indoor skydiving simulator for $\frac{1}{2}$ hour. Each person will have an equal amount of time in the simulator. If he has 3 friends with him, how long will each person get in the simulator?

22. What division problem is represented by the model below? Explain.

