Name: _____

Rising 6th Grade

Answers:

1a
1b
1c
1d
1e
2
3
4
5a 5b
6a 6b
7a
7b
7c

CHAPTER 1

Practice 1-1

In the number 9,513,607,482, write the digit in each place. Then give its value.

1a. thousands **b.** tens **c.** millions

d. ten millions **e.** billions

Write the number in standard form.

2. six billion, twelve million, ninety-eight

3. 9,000,000 + 70,000 + 6000 + 70 + 3

4. seventy-six and fourteen thousandths

Compare. Write <, =, or >.

5a. 326.49 ? 326.94 **b.** 0.2 ? 0.20

6a. 247,913 ? 247,193 **b.** 7.05 ? 7.5

Round each number to the place of the underlined digit.

7a. 7,280,961 **b.** $967.35 **c.** 6.143

1a 1b
2a 2b
3a 3b 3c
4a 4b 4c
5a 5b 5c

Practice 1-2

Find the missing number.

1a. 7 + 6 = ☐ + 7 **b.** 9 = ☐ + 9

2a. (4 + 5) + 8 = 4 + (☐ + 8) **b.** ☐ − 5 = 0

Add or subtract.

3a. 34,729 + 29,886 **b.** 48,924 + 9,789 **c.** $180.77 + 99.65

4a. 6000 − 2534 **b.** 9103 − 894 **c.** $447.03 − 195.80

5a. 125,704 + 306,199 + 511,111 **b.** 756,183 + 19,975 + 103,078 **c.** $375.89 + 46.50 + 97.28

Practice 2-2

Multiply.

1a. $6 \times 42{,}003$ **b.** 37×7018

2a. 473×3219 **b.** $78 \times \$40.98$

3a. $945 \times \$30.88$ **b.** 500×7873

Use rounding to estimate. Then multiply.

4a. $\$11.82 \times 647$ **b.** $\$34.03 \times 608$ **c.** $\$90.91 \times 356$

5a. 7583×209 **b.** 6108×978 **c.** 3315×462

6a. 8848×729 **b.** 2056×943 **c.** 7902×574

Find the product.

7a. 349×800 **b.** 3946×700 **c.** $\$34.77 \times 300$

Find the product.

8a. $n \times 376$ when $n = 129$

b. $917 \times n$ when $n = 705$

Problem Solving

9. At a sale, Leslie sold 2000 stickers for \$0.25 each. How much money did she collect?

10. A ticket agent sold 458 tickets at \$16.75 each. How much money did she collect?

11. The factors are 3905 and 748. Find the product.

12. Marty's heart beats 72 times in one minute. At this rate, how many times will Marty's heart beat in an hour?

13. What is the total cost of 394 hats that cost \$7.49 each?

Answers

1a
1b
2a
2b
3a
3b
4a
4b
4c
5a
5b
5c
6a
6b
6c
7a
7b
7c
8a
8b
9
10
11
12
13

Practice 3-2

Divide and check.

1a. $40\overline{)160}$ **b.** $50\overline{)2500}$ **c.** $30\overline{)90{,}000}$

2a. $17\overline{)399}$ **b.** $36\overline{)780}$ **c.** $25\overline{)906}$

3a. $51\overline{)3488}$ **b.** $82\overline{)9486}$ **c.** $46\overline{)7700}$

4a. $62\overline{)\$45.88}$ **b.** $13\overline{)\$44.33}$

5a. $78\overline{)69{,}408}$ **b.** $46\overline{)\$175.72}$

6a. $31\overline{)624{,}516}$ **b.** $16\overline{)963{,}008}$

Write whether each number is divisible by 2, 3, 4, 5, 6, 9, and/or 10.

7a. 1800 **b.** 32,508 **c.** 602,535

Compute. Use the order of operations.

8a. $52 + 6 \times 7 \div 3$ **b.** $12 - 8 \div 4 + (7 - 3) \times 5$

9a. $8 \times 3 - 21 \div 7$ **b.** $(3 \times 9) - 8 + (48 \div 6)$

Problem Solving

10. Ms. Cooper has 182 markers. If she has 14 students in her art club, what is the greatest number of markers each student can have?

11. Fifty-two ticket agents sold 16,640 tickets. If each agent sold the same number of tickets, how many tickets did each sell?

12. Elena has 1372 stamps. She has 96 pages in her stamp album. How many stamps can go on each page? How many stamps will be left over?

13. Jed consumed 2680 calories yesterday. If he ate an equal number of calories in 3 meals, estimate the number of calories per meal.

14. Estimate to compare the quotient of 9158 divided by 38 with the quotient of 10,148 divided by 43.

15. How many quarters are in $70.75?

Answers

1a.
1b.
1c.
2a.
2b.
2c.
3a.
3b.
3c.
4a.
4b.
5a.
5b.
6a.
6b.
7a.
7b.
7c.
8a.
8b.
9a.
9b.
10.
11.
12.
13.
14.
15.

Practice 4-1

Write whether each is a prime or composite number.

1a. 59 **b.** 121 **c.** 309

Find the missing term.

2a. $\frac{2}{5} = \frac{n}{10}$ **b.** $\frac{6}{7} = \frac{30}{n}$

3a. $\frac{10}{13} = \frac{30}{?} = \frac{?}{78}$ **b.** $\frac{3}{4} = \frac{?}{24} = \frac{54}{?}$

Find the greatest common factor (GCF) for each set of numbers.

4a. 6 and 12 **b.** 8, 12, and 32

Write each fraction in lowest terms.

5a. $\frac{15}{27}$ **b.** $\frac{24}{36}$ **c.** $\frac{35}{49}$

6a. $\frac{18}{48}$ **b.** $\frac{20}{28}$ **c.** $\frac{49}{63}$

Find the least common denominator (LCD) of each set of fractions.

8a. $\frac{3}{5}$, $\frac{2}{3}$ **b.** $\frac{1}{6}$, $\frac{3}{4}$, and $\frac{5}{8}$

Problem Solving

9. Use a factor tree to find the prime factorization of 28.

10. Mario has seen 5 of the 8 films at the multiplex. What fractional part of the films has he not yet seen?

11. Liz painted $\frac{3}{12}$ of her design blue and $\frac{2}{8}$ of it red. Did she paint the same amount in each color? Explain your answer.

12. Write $\frac{4}{5}$ as an equivalent fraction with a denominator of 20.

13. Seven tenths is equivalent to how many fortieths?

Answers

1a 1b 1c

2a 2b

3a 3b

4a 4b

5a 5b 5c

6a 6b 6c

8a 8b

9

10

11

12

13

Practice 6-1

Rename each as a fraction.

1a. $3\frac{1}{4}$ **b.** $7\frac{2}{5}$ **c.** $6\frac{9}{10}$

Write the reciprocal of each number.

2a. 5 **b.** $3\frac{1}{2}$ **c.** $2\frac{1}{4}$

Multiply.

4a. $\frac{3}{4} \times \frac{7}{10}$ **b.** $\frac{5}{8} \times \frac{3}{4}$ **c.** $\frac{1}{8} \times \frac{5}{9}$

5a. $4 \times \frac{5}{6}$ **b.** $3 \times \frac{2}{3}$ **c.** $\frac{4}{5} \times 9$

6a. $\frac{1}{3} \times 3$ **b.** $\frac{6}{7} \times \frac{9}{8}$ **c.** $8 \times \frac{3}{5}$

Divide.

8a. $\frac{3}{4} \div 4$ **b.** $\frac{5}{8} \div 10$ **c.** $\frac{3}{4} \div \frac{1}{2}$

9a. $\frac{4}{9} \div \frac{3}{5}$ **b.** $\frac{7}{15} \div \frac{3}{5}$ **c.** $\frac{3}{4} \div \frac{5}{8}$

10a. $6 \div \frac{2}{3}$ **b.** $5 \div \frac{10}{13}$ **c.** $9 \div \frac{3}{7}$

Problem Solving

11. In a class of 28 students, $\frac{1}{7}$ wear glasses. How many students wear glasses?

12. Evan swam $\frac{7}{8}$ mi. He broke up the swim into $\frac{1}{12}$ -mi laps. How many laps did he swim?

13. James grew $\frac{2}{3}$ in. each month for the last five months. How much has he grown?

14. Six friends share $\frac{3}{4}$ lb of chocolates. How much chocolate does each get?

Answers

1a 1b 1c

2a 2b 2c

4a 4b 4c

5a 5b 5c

6a 6b 6c

8a 8b 8c

9a 9b 9c

10a 10b 10c

11

12

13

14

Practice 7-1

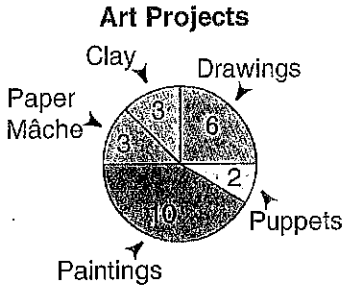
Problem Solving

Use the spinner to find the probability of each event.

1a. P(even) **b.** P(<10)

2a. P(5 or 10) **b.** P(8)

Use the circle graph to solve problems 3–4.



3. How many art projects are on display?

4. What fraction of the projects is:
a. drawings?
b. clay?
c. paintings.

Practice 7-2

Problem Solving

Write a survey question that could have been used to obtain the data. Then complete the cumulative frequency table.

	Trees Seen on Hike			
	Tree	**Tally**	**Frequency**	**Cumulative Frequency**
1.	Elm	𝍸 𝍸 𝍸	?	?
2.	Oak	𝍸 𝍸 ||	?	?
3.	Pine	?	13	?
4.	Birch	?	10	?

Class Sizes					
Class	5A	5B	5C	5D	5E
Number of Students	32	29	34	32	33

7. Find the range, mean, median, and mode of the class sizes.

6. Make a histogram to show the following data:

Height of Seedlings in cm				
45	52	57	70	35
20	60	46	62	40
55	52	65	32	42

7. Diane's test scores for the first grading period are; 81, 82, 76, 95, 88, 83, 85, 84, 83, and 93. Draw a line plot for Diane's test scores. Then find the range and mode.

Answer 7-1

1a 1b

2a 2b

3

4

7

Answer 7-2 bottom

1

2

3

4

6

Practice 8-1

Write the place of the underlined digit. Then write its value.

1a. 4$\underline{9}$.6 **b.** 0.34$\underline{8}$ **c.** 12.6$\underline{7}$2

Write each decimal in expanded form.

2a. 367.04 **b.** 70.163 **c.** 6.45

Estimate by both rounding and front-end estimation. Between what two numbers will the exact sum or difference be?

3a. 0.77 + 0.586 **b.** 3.54 + 9.078 + 5.166 **c.** 0.923 − 0.68

Estimate by rounding. Then add or subtract.

4a. 0.473 + 0.96 **b.** 36.3 + 43.5 **c.** 17.004 + 12.059

5a. 0.75 − 0.2 **b.** 1.6 − 0.74 **c.** 17.439 − 8.8

6a. 94.637 + 17.08 + 24.3 **b.** 12 − 7.84

Problem Solving

7. Write the decimal that has seven thousandths, nine tenths, and six ones.
8. Marc rode his bike 4.35 km from home to the park. Then he rode along the park and back home again, a distance of 16.9 km. About how far did he ride?
9. What is 74.16 increased by 9.056?
10. Snow accumulation in March was 1.26 in., 3.75 in., and 2.049 in. Find the total snowfall in March.
11. A board is 36.37 cm long. If Richard cuts off 9.5 cm from it, how much of the board is left?
12. Janis spent $7.99 on invitations, $3.79 on balloons, and $4.75 on streamers for a party. How much change did she get back from a $20 bill?
13. Eleni measured two books. One was 22 mm thick. The other was 18.25 mm thick. How much thicker was the first book?

Answer 8-1

1a
1b
1c
2a
b
c
3a
b
c
4a
b
c
5a
b
c
6a
6b
6c
7
8
9
10
11
12
13

CHAPTER 9

Practice 9-1

Find the missing number.

1a. $n \times 3.7 = 370$ **b.** $1000 \times n = 324$

2a. $42.6 \div n = 4.26$ **b.** $n \div 1000 = 0.007$

Multiply.

3a. 7×0.65 **b.** 2.7×0.8 **c.** 0.16×0.9

4a. 3.2×0.7 **b.** 0.63×0.3 **c.** 7×0.32

5a. 0.6×3.74 **b.** 4.3×6.92 **c.** 0.08×11.5

Divide and check.

6a. $0.374 \div 2$ **b.** $0.3 \div 6$ **c.** $1.6 \div 8$

7a. $0.64 \div 8$ **b.** $5.39 \div 5$ **c.** $1.308 \div 6$

8a. $2.4 \div 2$ **b.** $0.92 \div 4$ **c.** $0.744 \div 6$

Problem Solving

9. Estimate the product of 2.287 and 6.9. Is the actual product greater or less than the estimated product?
10. Is the estimated product of 13.608 and 0.62 greater or less than the exact product?
11. Estimate the quotient of 47.32 and 6 using compatible numbers.
12. The school year has 180 days. If 0.05 of them are missed due to bad weather, how many days are missed?
13. Burritos are $2.79 each. How much do 100 burritos cost?
14. Evan spent $74.33 for 3 video games. Estimate the cost of each game.
15. Liam picked 64.3 pounds of fruit. Three tenths of the fruit were pears. How many pounds of pears did Liam pick?

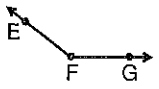
Answer 9-1

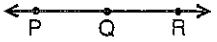
1a 1b
2a 2b
3a 3b 3c
4a 4b 4c
5a 5b 5c
6a 6b 6c
7a 7b 7c
8a 8b 8c
9 12 15
10 13
11 14

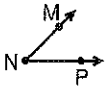
Practice 10-1

Classify each angle.

1a. 

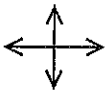
b. 

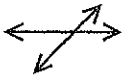
2a. 

b. 

Are the lines perpendicular? Write *Yes* or *No*.
Use a protractor to check your answers.

3a. 

b. 

c. 

Name each polygon.

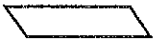
4a. 

b. 

Classify each quadrilateral.

5a. 

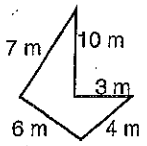
b. 

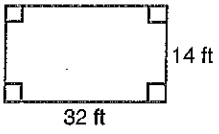
6a. 

b. 

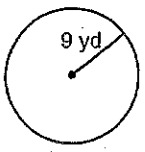
Practice 10-2

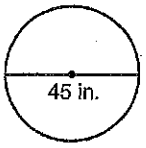
Find the perimeter of each polygon.

1a. 

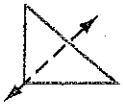
b. 

Find the circumference of each circle.

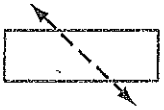
2a. 

b. 

Is the dotted line a line of symmetry?

3a. 

b. 

4a. 

b. 

Answers

1a
1b
2a
2b
3a
3b
3c
4a
4b
5a
5b
6a
6b

1a
1b
2a
2b
3a
3b
4a
4b

Add or subtract.

5a. 3 d 17 h
+ 2 d 15 h

b. 4 ft 9 in.
+ 3 ft 7 in.

6a. 5 qt 1 c
− 3 qt 3 c

b. 7 T 380 lb
− 3 T 900 lb

7a. 2 wk 6 d
+ 7 wk 5 d

b. 3 y
− 1 y 7 mo

8a. 9 yd 27 in.
+ 3 yd 30 in.

b. 10 lb 5 oz
− 5 lb 6 oz

9a. 3 gal 3 qt
+ 2 gal 1 qt

b. 6 y
− 3 y 280 d

Answers

5a
5b
6a
6b
7a
7b
8a
8b
9a
9b

Practice 11-1

Write the letter of the best estimate.

1. A bed might be 76 ? long.
   a. ft **b.** yd **c.** in.

2. A brick might weigh 3 ?.
   a. lb **b.** oz **c.** T

3. A coffee pot might hold 2 ?.
   a. gal **b.** pt **c.** qt

4. The temperature during a snow storm might be ?.
   a. 20°F **b.** 40°F **c.** 60°F

1
2
3
4

Compare. Write <, =, or >.

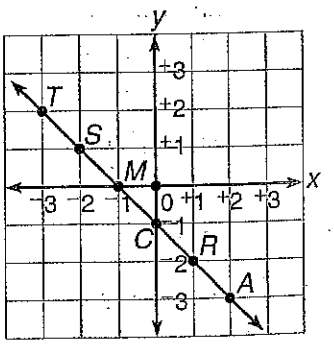
5a. 6 lb ? 86 oz **b.** 250 min ? 4 h

6a. 4 gal ? 20 qt **b.** 5 yd ? 180 in.

5a
5b
6a
6b

Use the graph.

10. Name the point for:
    a. (+2, −3)
    b. (+1, −2)
    c. (−1, 0)
    d. (−3, +2)



10a
b
c
d