

**TUESDAY DC49  
NO CALCULATOR****7.EE.3B** 1 POINT

- 1 Tara purchased a puzzle with the following dimensions.

$$15\frac{3}{8} \text{ inches in length} \times 24\frac{4}{5} \text{ inches in width}$$

Tara wants to estimate the perimeter of puzzle. Which expression best represents the estimated perimeter, in inches, of the puzzle?

- A  $2(15 - 25)$   
B  $(2)(2 \times 15) + (2 \times 25)$   
C  $2(15) + 2(25)$   
D  $2(15 \times 25)$

**7.NS.1A** 1 POINT

- 2 Select the statement that is not true.
- A Anthony's bank statement shows he deposited \$50 on Monday and withdrew \$50 on Friday to pay for groceries. Anthony has \$0 in his bank account on Saturday.
- B Aliyah starts walking from the doorstep of her home. She walks 40 meters forward and then walks 40 meters backward. Aliyah ends up back on her doorstep if she takes steps that are each the exact distance in length.
- C A football team starts on the 30 – yard marker on the football field and then gains three yards on the first down. On the second down, the quarterback is sacked for a three yard loss. On the third down, the football team starts with the ball on the 36 – yard marker on the football field.
- D Jasmine added two numbers that are opposites which means they always equal zero.

**7.EE.4A** 1 POINT

- 3 Solve for x:





$$9 = 5 - \frac{2}{3}x$$

**THURSDAY DC50**

**CALCULATOR**

**7.NS.3** 1 POINT

- 1 A cold front passed through between 10: 00 A. M. and 8: 00 P. M. on Friday. The temperature dropped by an average of  $3.5^{\circ}F$  per hour during this time period. The temperature at 8: 00 P. M. is recorded in the chart below.

			
10:00AM	?°F	8:00PM	-12°F

What was the temperature, in degrees Fahrenheit, at 10: 00 A. M. before the temperature dropped?

- A 16°F
- B 19.5°F
- C 23°F
- D 26.5°F

**7.SP.2** 1 POINT

- 2 The Indianapolis Children’s Museum surveyed 200 of their members with children under the age of three about the number of times they visit the museum every month. The table below shows the results of the survey.

Number of Visits per month	Number of Visitors
1	6
2	11
3	21
4	68
5	52
6 or more times	42

There are currently a total of 1,100 active members with children under the age of three. What is the best estimate for the number of annual members with children under the age of three that will visit the museum less than 4 times in the next month?

- A 209
- B 517
- C 583
- D 891

**7.G.5** 1 POINT

- 3 A cube with a surface area of 96 square inches is shown. What is the volume, in cubic inches, of the cube?

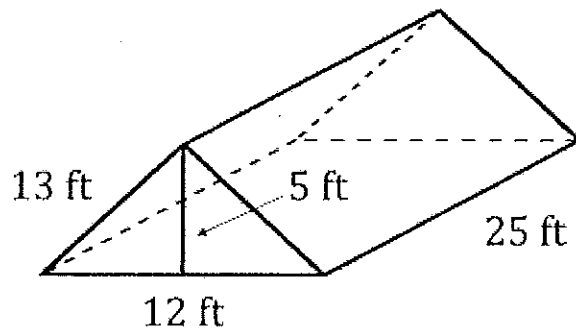
A	A	B	C	F	F
5	4	3	2	1	0
100%	93%	85%	75%	60%	INCOMPLETE

**7.G.1** 1 POINT

1 The blueprint for a CrossFit studio has a rectangular room in it that is 10.2 inches in length by 8 inches in width. The blueprint scale is 2 inches: 5 feet. Find the length and width of the actual studio.

**7.G.5** 1 POINT

2 The tent below is in the shape of a triangular prism. How many cubic feet of space are in the tent?




**7.RP.1** 1 POINT

3 Aliyah picks  $3\frac{3}{4}$  quarts of blueberries every  $\frac{5}{8}$  of an hour. If Aliyah continues to pick the blueberries at a constant rate, then how many quarts of blueberries will she pick per hour?

- A  $2\frac{11}{32}$
- B  $3\frac{1}{8}$
- C  $5\frac{1}{5}$
- D 6

**7.EE.1** 1 POINT

4 Simplify the expressions:  $\frac{2}{3}(6x - 18y) + 2(x - 3)$

**7.RP.3** 1 POINT

5 A grocery store purchased a gallon of milk for \$2.50 and sold it to a customer for 75% more than the purchase price. The customer was charged a 6% sales tax when the gallon of milk was sold. What was the customer's total cost for the gallon of milk?


- A \$4.64
- B \$4.80
- C \$4.94
- D \$5.06



**Solve.**

- 4 Which of the following is *not* true?
- A The median can be the same value as the IQR.
  - B The median can be different from all of the data values.
  - C The median can be less than the lower quartile.
  - D The median can be the same value as the mean.

Try constructing data sets with the given characteristics.




- 5 Gerald kept track of the high temperatures for two weeks, and he recorded the results in a table.

Day	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Week 1 Temp. (°F)	52	60	59	48	52	53	56
Week 2 Temp. (°F)	59	62	63	60	56	55	54

- a. Calculate the difference between the weekly median high temperatures.  
\_\_\_\_\_
- b. Find the IQR of each data set. How many IQRs apart are the medians? What does this indicate?  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_


How do you determine the median of a data set?



- 6 Create two sets of data with the following characteristics:
- Each data set has 7 values.
  - The median of set 1 is greater than the median of set 2.
  - The IQRs of the data sets are the same.

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\_\_\_\_\_  
\_\_\_\_\_

Use examples of data sets that you have seen to help you solve this problem.



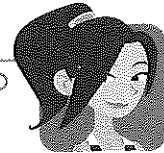

## Experimental Probability

## Solve the problems.

- 1 Two months ago, a car dealership sold 150 cars. Thirty of the cars were red. Last month, the dealership sold 200 cars. Predict the number of red cars they sold last month.

**Show your work.**

What do you need to know in order to make a prediction?



Solution: \_\_\_\_\_

- 2 Carlotta rolls a number cube with faces labeled 1–6. Tell whether each statement is *True* or *False*.

- a. Rolling a number less than 2 is unlikely.  True  False
- b. Rolling a 4 or a 6 is likely.  True  False
- c. Rolling an even number is as likely as rolling an odd number.  True  False

When is an outcome likely?



- 3 Ben spins a spinner with four sections labeled X, Y, W, and Z. He gets these results: X, X, X, Y, W, Z. What is the experimental probability that the spinner will *not* stop on Z on the next spin?

- A  $\frac{1}{6}$                       C  $\frac{3}{4}$
- B  $\frac{1}{4}$                         D  $\frac{5}{6}$

Wayne chose **A** as the correct answer. How did he get that answer?

How many times did Ben spin the spinner?  
How many Zs did he spin?



**Solve.**

4 Josh rolls a number cube with faces labeled 1–6 six times with these results:

3, 3, 5, 6, 1, 2

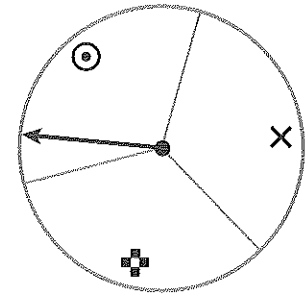
Elise spins the spinner shown six times with these results: ☉, ☉, ☛, ✕, ☛, ☛.

Hal flips a coin 6 times with these results:

H, T, T, T, H, T

Which of the following experimental probabilities are equal? Choose all that apply.

- A Josh rolls an even number on the number cube.
- B Elise spins the spinner and it lands on ✕.
- C Hal flips the coin and it lands on H.
- D Josh rolls a number less than 4 on the number cube.



How do you calculate experimental probabilities?



5 The table shows the number of each size T-shirt that Terry's Tees had at the beginning of the month and at the end of the month. Terry Tee's manager is ordering 240 T-shirts for the next month. How many of each size shirt should the manager order?

Size	Beginning of Month	End of Month
S	60	20
M	75	10
L	40	10
XL	25	10
Total	200	50

**Show your work.**

How many T-shirts of each size were sold?  
How many T-shirts were sold in all?



Solution: \_\_\_\_\_  
\_\_\_\_\_



## Experimental and Theoretical Probabilities

Study the example showing how to compare probabilities.  
Then solve problems 1–6.

**Example**

Kimi places 1 red, 1 blue, 1 black, and 1 green cube in a bag. She draws a cube without looking, records the outcome, and puts the cube back in the bag. Her results are shown in the table. Find and compare the experimental probability and the theoretical probability that the next cube Kimi draws will be red.

**Kimi's Results**

Outcome	Frequency
red	8
blue	4
black	7
green	5

The sample space is the same for both probabilities. The equally possible outcomes are red, blue, black, and green.

Theoretical probability:  $P(\text{red}) = \frac{\text{number of favorable outcomes}}{\text{number of possible outcomes}} = \frac{1}{4}$

Experimental probability:  $P(\text{red}) = \frac{\text{number of red cubes drawn}}{\text{total number of trials}} = \frac{8}{24}$

Because  $\frac{1}{4} = \frac{6}{24}$  and  $\frac{6}{24} < \frac{8}{24}$ , the theoretical probability is less than the experimental probability.

- 1 The other students in Kimi's class conduct the same experiment. Their results are shown in the table. Do you expect the experimental probability of the class results to be closer to the theoretical probability than Kimi's results? Why?

**Class Results**

Outcome	Frequency
red	116
blue	121
black	124
green	119

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- 2 Compare the experimental probability from the class results with the theoretical probability. Are the class results closer to the theoretical probability than Kimi's results? Explain.

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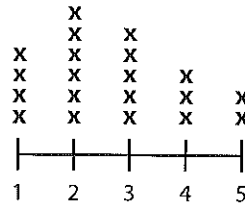
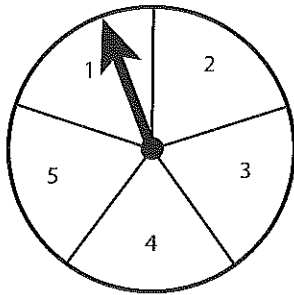


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**Solve.**

- 3** Heidi spins the spinner shown. She records her results in the line plot.



- a.** What is the theoretical probability of each outcome?

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- b.** What is the experimental probability of each outcome?

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- 4** Heidi's class conducts the same experiment and combines the results. Find the experimental probability based on the class results shown in the table. Record the probabilities in the table.

Outcome	Frequency	Experimental Probability
1	85	
2	80	
3	90	
4	75	
5	70	

- 5** Compare the experimental probabilities from the class data to those from Heidi's data.

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- 6** Describe an event involving a number cube for which the experimental probability and the theoretical probability are both equal to  $\frac{1}{3}$ .

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# Addition and Subtraction with Rational Numbers—Skills Practice

Name: \_\_\_\_\_

Form B

Add integers.

1  $-6 + (-4) =$  \_\_\_\_\_

2  $16 + (-8) + (-2) =$  \_\_\_\_\_

3  $17 + (-13) =$  \_\_\_\_\_

4  $13 + (-3) + 7 + (-17) =$  \_\_\_\_\_

5  $-13 + (-16) =$  \_\_\_\_\_

6  $-18 + 17 =$  \_\_\_\_\_

7  $15 + (-18) =$  \_\_\_\_\_

8  $-18 + (-9) + (-2) =$  \_\_\_\_\_

9  $-14 + 32 =$  \_\_\_\_\_

10  $18 + 16 + (-8) =$  \_\_\_\_\_

11  $-14 + 18 + 4 + 10 =$  \_\_\_\_\_

12  $-13 + (-4) =$  \_\_\_\_\_

13  $-16 + (-12) =$  \_\_\_\_\_

14  $-5 + 13 + (-5) + 7 =$  \_\_\_\_\_

15  $86 + (-12) =$  \_\_\_\_\_

16  $26 + 17 + (-6) =$  \_\_\_\_\_

17  $-4 + 12 =$  \_\_\_\_\_

18  $-2 + 64 + (-18) =$  \_\_\_\_\_

19  $-8 + (-2) =$  \_\_\_\_\_

20  $4 + (-5) + (-9) + 10 =$  \_\_\_\_\_

21  $-13 + (-13) =$  \_\_\_\_\_

22  $14 + 7 + (-4) + (-7) + 8 =$  \_\_\_\_\_

23  $16 + (-4) + (-2) + 17 + 13 =$  \_\_\_\_\_

24  $7 + (-14) + (-10) + 17 + 15 =$  \_\_\_\_\_

# Addition and Subtraction with Rational Numbers—Skills Practice

Name: \_\_\_\_\_

**Subtract integers.**

**Form A**

**1**  $-8 - (-14) = \underline{\quad}$

**2**  $-8 - 4 - (-8) = \underline{\quad}$

**3**  $17 - (-8) = \underline{\quad}$

**4**  $6 - (-7) - (-3) - 16 = \underline{\quad}$

**5**  $-12 - 4 = \underline{\quad}$

**6**  $-13 - (-7) = \underline{\quad}$

**7**  $6 - (-3) = \underline{\quad}$

**8**  $-5 - (-17) - (-5) = \underline{\quad}$

**9**  $-62 - (-11) = \underline{\quad}$

**10**  $-4 - 8 - 16 = \underline{\quad}$

**11**  $-8 - 15 = \underline{\quad}$

**12**  $4 - 17 - (-6) - 3 = \underline{\quad}$

**13**  $11 - (-15) = \underline{\quad}$

**14**  $-46 - 21 = \underline{\quad}$

**15**  $41 - (-13) - 21 = \underline{\quad}$

**16**  $14 - (-17) = \underline{\quad}$

**17**  $55 - (-29) - (-45) = \underline{\quad}$

**18**  $8 - (-14) - (-2) - 4 = \underline{\quad}$

**19**  $6 - 7 - (-4) - 3 = \underline{\quad}$

**20**  $-25 - 25 = \underline{\quad}$

**21**  $30 - (-15) - 40 = \underline{\quad}$

**22**  $-7 - (-14) - 4 - (-27) - 5 = \underline{\quad}$

**23**  $-12 - (-7) - (-19) - (-13) - (-2) = \underline{\quad}$

**24**  $-11 - (-5) - 9 - (-13) - (-5) = \underline{\quad}$

**25**  $8 - (-3) - 10 - (-12) - (-7) = \underline{\quad}$

# Addition and Subtraction with Rational Numbers—Skills Practice

Name: \_\_\_\_\_

Add rational numbers.

Form B

1  $-5.25 + 9.76 =$  \_\_\_\_\_

2  $-\frac{5}{8} + 11 + \left(-\frac{3}{8}\right) =$  \_\_\_\_\_

3  $-6 + \frac{3}{4} =$  \_\_\_\_\_

4  $6 + (-8.2) =$  \_\_\_\_\_

5  $-1\frac{3}{8} + \frac{5}{8} =$  \_\_\_\_\_

6  $-2\frac{1}{5} + \frac{3}{5} =$  \_\_\_\_\_

7  $14.9 + (-17) =$  \_\_\_\_\_

8  $-\frac{1}{3} + \left(-\frac{5}{6}\right) + 1\frac{1}{6} =$  \_\_\_\_\_

9  $-9 + \left(-1\frac{1}{2}\right) =$  \_\_\_\_\_

10  $-16.08 + 5.2 =$  \_\_\_\_\_

11  $-12 + (-6.75) =$  \_\_\_\_\_

12  $-\frac{3}{4} + \left(-\frac{3}{4}\right) =$  \_\_\_\_\_

13  $\frac{4}{5} + \left(-\frac{3}{5}\right) =$  \_\_\_\_\_

14  $3.6 + (-18.8) =$  \_\_\_\_\_

15  $2\frac{1}{2} + \left(-\frac{1}{8}\right) + \left(-\frac{3}{8}\right) =$  \_\_\_\_\_

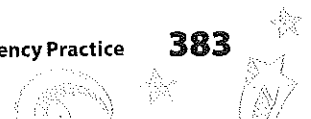
16  $-4.25 + 10 =$  \_\_\_\_\_

17  $-9.1 + (-4.3) + 19.1 =$  \_\_\_\_\_

18  $-4.1 + (-2.8) =$  \_\_\_\_\_

19  $4.5 + (-8.2) + (-14.5) =$  \_\_\_\_\_

20  $-4\frac{1}{3} + (-7) =$  \_\_\_\_\_



# Addition and Subtraction with Rational Numbers—Skills Practice

Name: \_\_\_\_\_

Add and subtract rational numbers.

Form A

1  $4\frac{3}{4} - (-2\frac{1}{4}) =$  \_\_\_\_\_

2  $-16.5 - 11 =$  \_\_\_\_\_

3  $\frac{1}{5} - (-\frac{4}{5}) =$  \_\_\_\_\_

4  $7.75 - 14.25 =$  \_\_\_\_\_

5  $-8\frac{1}{3} - (-4) =$  \_\_\_\_\_

6  $-15.7 - (-16.2) =$  \_\_\_\_\_

7  $8.7 - (-5.2) =$  \_\_\_\_\_

8  $6\frac{5}{6} - 9\frac{1}{6} =$  \_\_\_\_\_

9  $6.2 - (-6.8) =$  \_\_\_\_\_

10  $11.92 - 4.5 =$  \_\_\_\_\_

11  $2\frac{1}{4} - 8\frac{1}{2} + 7\frac{3}{4} =$  \_\_\_\_\_

12  $4.2 - 17.6 + 5.8 =$  \_\_\_\_\_

13  $-12.6 + 4.2 - (-2.6) =$  \_\_\_\_\_

14  $-5\frac{2}{5} - 8\frac{4}{5} + 15\frac{2}{5} =$  \_\_\_\_\_

15  $-6.5 + 11 - (-6.5) =$  \_\_\_\_\_

16  $\frac{1}{6} - (-7) + 3 - (-\frac{5}{6}) =$  \_\_\_\_\_

17  $\frac{1}{4} - 1\frac{3}{4} + 2\frac{3}{4} - (-2\frac{3}{4}) =$  \_\_\_\_\_

18  $-6.1 - 6 - (-6.1) + 16 =$  \_\_\_\_\_

19  $1.25 - 2.75 - (-3.75) + (-7.25) =$  \_\_\_\_\_

20  $8\frac{1}{5} - \frac{3}{5} + (-\frac{4}{5}) - (-1\frac{2}{5}) =$  \_\_\_\_\_

# Multiplication and Division with Rational Numbers—Skills Practice

Name: \_\_\_\_\_

Form B

Multiply rational numbers.

1  $\frac{1}{4} \times \left(-\frac{3}{4}\right) =$  \_\_\_\_\_

2  $5 \times (-2) \times 6 \times (-3) =$  \_\_\_\_\_

3  $-0.3 \times (-0.2) =$  \_\_\_\_\_

4  $-\frac{1}{3} \times \frac{2}{3} =$  \_\_\_\_\_

5  $-3 \times (-8) =$  \_\_\_\_\_

6  $-9 \times 6 =$  \_\_\_\_\_

7  $0.3 \times (-0.05) \times 0.6 =$  \_\_\_\_\_

8  $-0.4 \times 0.04 =$  \_\_\_\_\_

9  $9 \times (-9) =$  \_\_\_\_\_

10  $-\frac{2}{5} \times \frac{1}{5} \times \frac{3}{5} =$  \_\_\_\_\_

11  $-\frac{7}{8} \times \left(-\frac{3}{8}\right) =$  \_\_\_\_\_

12  $-0.2 \times 0.4 \times 0.6 =$  \_\_\_\_\_

13  $0.9 \times (-0.5) =$  \_\_\_\_\_

14  $-2 \times (-4) \times (-8) =$  \_\_\_\_\_

15  $-7 \times (-3) =$  \_\_\_\_\_

16  $-16 \times 10 =$  \_\_\_\_\_

17  $-\frac{5}{6} \times \frac{2}{5} \times \left(-\frac{1}{8}\right) =$  \_\_\_\_\_

18  $100 \times (-7) =$  \_\_\_\_\_

19  $-5 \times (-7) =$  \_\_\_\_\_

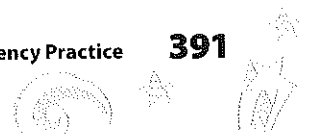
20  $9 \times (-8) =$  \_\_\_\_\_

21  $-\frac{1}{5} \times \left(-\frac{1}{2}\right) =$  \_\_\_\_\_

22  $-0.4 \times 0.1 \times (-0.3) \times (-0.5) =$  \_\_\_\_\_

23  $-\frac{1}{2} \times \frac{3}{2} \times \left(-\frac{3}{2}\right) \times \left(-\frac{1}{2}\right) =$  \_\_\_\_\_

24  $0.5 \times -0.2 \times (-2) \times 5 =$  \_\_\_\_\_



# Multiplication and Division with Rational Numbers—Skills Practice

Name: \_\_\_\_\_

Divide rational numbers.

Form A

1  $-\frac{1}{3} \div \left(-\frac{1}{6}\right) =$  \_\_\_\_\_

2  $56 \div (-8) =$  \_\_\_\_\_

3  $-3.6 \div 0.1 =$  \_\_\_\_\_

4  $-\frac{1}{2} \div \frac{1}{8} =$  \_\_\_\_\_

5  $-44 \div (-4) =$  \_\_\_\_\_

6  $-9.8 \div (-1) =$  \_\_\_\_\_

7  $\frac{1}{6} \div \left(-\frac{1}{6}\right) =$  \_\_\_\_\_

8  $6.4 \div (-2) =$  \_\_\_\_\_

9  $35 \div (-5) =$  \_\_\_\_\_

10  $-\frac{3}{4} \div \left(-\frac{1}{2}\right) =$  \_\_\_\_\_

11  $-90 \div 9 =$  \_\_\_\_\_

12  $\frac{2}{5} \div \left(-\frac{2}{3}\right) =$  \_\_\_\_\_

13  $-8.9 \div 10 =$  \_\_\_\_\_

14  $-36 \div (-3) =$  \_\_\_\_\_

15  $-24 \div (-0.2) =$  \_\_\_\_\_

16  $-\frac{5}{3} \div \frac{5}{6} =$  \_\_\_\_\_

17  $-100 \div (-50) =$  \_\_\_\_\_

18  $5.5 \div (-0.5) =$  \_\_\_\_\_

19  $\frac{1}{8} \div \left(-\frac{1}{5}\right) =$  \_\_\_\_\_

20  $-7.5 \div (-2.5) =$  \_\_\_\_\_

21  $-32 \div 4 =$  \_\_\_\_\_

22  $-3.6 \div 1.2 =$  \_\_\_\_\_

23  $-42 \div (-6) =$  \_\_\_\_\_

24  $-\frac{1}{3} \div \left(-\frac{1}{3}\right) =$  \_\_\_\_\_



# Using Properties of Operations— Skills Practice

Name: \_\_\_\_\_

Write an equivalent expression without parentheses, and combine terms if possible.

Form B

1  $7x + 6x =$  \_\_\_\_\_

2  $10n - 5(2n - 5) =$  \_\_\_\_\_

3  $\frac{5}{4}x - \frac{1}{4}(x + 12) =$  \_\_\_\_\_

4  $4 + 2x + 7(x + 2) =$  \_\_\_\_\_

5  $6(x - 7) + 50 =$  \_\_\_\_\_

6  $-6\left(m + \frac{1}{2}\right) =$  \_\_\_\_\_

7  $-3 + 8y - 6y - 4 =$  \_\_\_\_\_

8  $\frac{1}{4}y + 9 - \frac{5}{4}y - 2 =$  \_\_\_\_\_

9  $9(3a + 8) =$  \_\_\_\_\_

10  $\frac{1}{8}(16n + 24) =$  \_\_\_\_\_

11  $-7(x + 4) =$  \_\_\_\_\_

12  $2y + 3(y - 1.5) =$  \_\_\_\_\_

13  $-9x - 5x + 6x + 3 =$  \_\_\_\_\_

14  $2.5a + 5 + 4.5a + 3 =$  \_\_\_\_\_

15  $15\left(-\frac{1}{5}m + 2\right) - 4m =$  \_\_\_\_\_

16  $4.25m + 7 + 6.75m - 11 =$  \_\_\_\_\_

17  $7(y + 7) - 11y =$  \_\_\_\_\_

18  $8x - 2 - 5x + 2 =$  \_\_\_\_\_

19  $0.5(-16p - 6) =$  \_\_\_\_\_

20  $\frac{1}{5}y + \frac{4}{5}(y - 10) =$  \_\_\_\_\_

# Using Properties of Operations— Skills Practice

Name: \_\_\_\_\_

Use the distributive property to write the expression as a product.

Form A

1  $7x + 7 =$  \_\_\_\_\_

2  $6y + 14 - 8y =$  \_\_\_\_\_

3  $25x - 5 =$  \_\_\_\_\_

4  $16y + (-4) =$  \_\_\_\_\_

5  $4 - 8y =$  \_\_\_\_\_

6  $-8x - 16 =$  \_\_\_\_\_

7  $-11x - 44 =$  \_\_\_\_\_

8  $10 + 70x =$  \_\_\_\_\_

9  $10 - (-4y) =$  \_\_\_\_\_

10  $-2x + 12 - 4x =$  \_\_\_\_\_

11  $-25y + (-55) =$  \_\_\_\_\_

12  $20y - (-5) =$  \_\_\_\_\_

13  $-21x + 14 =$  \_\_\_\_\_

14  $18x - 33 =$  \_\_\_\_\_

15  $4y + 22 + 7y =$  \_\_\_\_\_

16  $-7 + (-21x) =$  \_\_\_\_\_

17  $6 + (-12y) =$  \_\_\_\_\_

18  $-5x + 33 + 16x =$  \_\_\_\_\_

19  $15y - 35 =$  \_\_\_\_\_

20  $-40y + 100 =$  \_\_\_\_\_

# Two-Step Equations—Skills Practice

Name: \_\_\_\_\_

Solve equations of form  $px + q = r$  with integers.

Form B

1  $-4x + 12 = 8$

2  $8x + 8 = 0$

3  $5x + 6 = -14$

4  $-250 = 25x - 75$

5  $30 = 20x - 10$

6  $38 = 3x + 17$

7  $11x - 16 = -49$

8  $-18x - 36 = -36$

9  $86 = 10x + 26$

10  $-8x - 11 = 45$

11  $-164 = -50x + 36$

12  $0 = 12x - 12$

13  $-12 = -9x - 3$

14  $9x + 7 = -2$

15  $-8x + 23 = 103$

16  $-6x + 53 = 5$

# Two-Step Equations—Skills Practice

Name: \_\_\_\_\_

Solve equations of form  $px + q = r$  with rational numbers.

Form A

1  $-3x + 6 = 9.9$

2  $8\frac{3}{5} = -4x + 5\frac{3}{5}$

3  $1.2x + 5.3 = 0.5$

4  $-\frac{1}{4}x + 6 = 10$

5  $7 = 11 - 0.2x$

6  $0.4x + 15 = 39.8$

7  $1\frac{3}{8} = \frac{1}{4}x + 1$

8  $\frac{2}{3}x - 4 = 36$

9  $\frac{1}{5} = \frac{7}{5} - \frac{1}{10}x$

10  $-8.2 = -7.1 + 11x$

11  $-13\frac{3}{4} = -\frac{7}{10}x + \frac{1}{4}$

12  $\frac{1}{8}x + \frac{3}{4} = \frac{1}{4}$

13  $-5.6x + 8.8 = 3.2$

14  $8x - 4\frac{2}{3} = 19\frac{1}{3}$