

STUDY LINK
5•1
Parts-and-Whole Fraction Practice


For the following problems, use counters or draw pictures to help you.

1. If 15 counters are the whole set, how many are $\frac{3}{5}$ of the set?
 _____ counters
2. If 18 counters are the whole set, how many are $\frac{7}{9}$ of the set? _____ counters
3. If 20 counters are the whole set, what fraction of the set is 16 counters? _____
4. If 50 counters are the whole set, what fraction of the set is 45 counters? _____
5. If 35 counters are half of a set, what is the whole set? _____ counters
6. If 12 counters are $\frac{3}{4}$ of a set, what is the whole set? _____ counters
7. Gerald and Michelle went on a 24-mile bike ride.
 By lunchtime, they had ridden $\frac{5}{8}$ of the total distance.
 How many miles did they have left to ride after lunch? _____ miles
8. Jen and Heather went to lunch. When the bill came, Jen discovered that she had only \$8. Luckily, Heather had enough money to pay the other part, or $\frac{3}{5}$, of the bill.
 - a. How much did Heather pay? _____
 - b. How much was the total bill? _____
 - c. Explain how you figured out Heather's portion of the bill.

Practice

9. $3 \overline{)42}$ _____

10. $3 \overline{)420}$ _____

11. $30 \overline{)420}$ _____

12. $30 \overline{)4,200}$ _____

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Fraction and Mixed-Number Practice

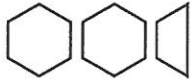


Unit
hexagon




For the problems below, the hexagon is worth 1.

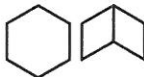
Write the mixed-number name and the fraction name shown by each diagram.

1.  Mixed number _____


Fraction _____

2.  Mixed number _____


Fraction _____

3.  Mixed number _____

Fraction _____

4.  Mixed number _____

Fraction _____

5.  Mixed number _____

Fraction _____

6. Make up a mixed-number problem of your own in the space below.

Practice

7. $7 \overline{)1,834}$ _____

8. $6 \overline{)196} \rightarrow$ _____

9. $8 \overline{)984}$ _____

10. $9 \overline{)651} \rightarrow$ _____

Name _____

Date _____

Time _____

STUDY LINK
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Equivalent Fractions



If the fractions are equivalent, write = in the answer blank.

If the fractions are not equivalent, write ≠ (not equal to) in the answer blank.

1. $\frac{3}{4}$ _____ $\frac{9}{12}$

2. $\frac{3}{10}$ _____ $\frac{1}{5}$

3. $\frac{7}{14}$ _____ $\frac{8}{15}$

4. $\frac{10}{12}$ _____ $\frac{5}{6}$

5. $\frac{16}{100}$ _____ $\frac{8}{50}$

6. $\frac{36}{72}$ _____ $\frac{1}{2}$

7. $\frac{7}{12}$ _____ $\frac{21}{36}$

8. $\frac{8}{3}$ _____ $\frac{16}{6}$

Fill in the boxes to complete and match the equivalent fractions.

Example: $\frac{\boxed{2}}{15} = \frac{6}{45}$

9. $\frac{3}{5} = \frac{\boxed{}}{10}$

10. $\frac{2}{3} = \frac{14}{\boxed{}}$

11. $\frac{44}{55} = \frac{\boxed{}}{5}$

12. $\frac{12}{\boxed{}} = \frac{3}{10}$

13. $\frac{35}{60} = \frac{7}{\boxed{}}$

14. $\frac{9}{16} = \frac{45}{\boxed{}}$

15. $\frac{9}{36} = \frac{\boxed{}}{108}$

16. $\frac{7}{\boxed{}} = \frac{1}{8}$

17. $\frac{30}{135} = \frac{\boxed{}}{27}$

18. $\frac{10}{16} = \frac{\boxed{}}{112}$

Practice

19. $7 \overline{) \$49.28}$ _____

20. $15 \overline{) \$300.45}$ _____

21. $21 \overline{) 367} \rightarrow$ _____

22. $8 \overline{) 644} \rightarrow$ _____

Name _____

Date _____

Time _____

STUDY LINK
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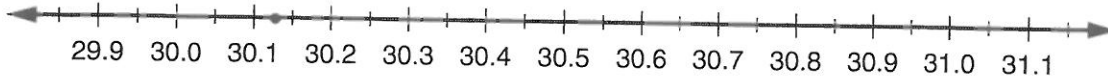
Decimal Numbers



1. Mark each number on the number line. The first one is done for you.

30.13 30.72 31.05 29.94 30.38

30.13



2. Round the area of each country to the nearest tenth of a square kilometer.

Ten Smallest Countries		Area in Square Kilometers	Area Rounded to the Nearest Tenth of a Square Kilometer
1	Vatican City	0.44 km ²	km ²
2	Monaco	1.89 km ²	km ²
3	Nauru	20.72 km ²	km ²
4	Tuvalu	23.96 km ²	km ²
5	San Marino	60.87 km ²	km ²
6	Liechtenstein	160.58 km ²	km ²
7	Marshall Islands	181.30 km ²	km ²
8	St. Kitts and Nevis	296.37 km ²	km ²
9	Maldives	297.85 km ²	km ²
10	Malta	315.98 km ²	km ²

Source: *The Top 10 of Everything 2005*

Practice

Solve and write the fact family number sentences.

3. $32 \overline{)768}$

_____ ÷ _____ = _____ _____ ÷ _____ = _____
 _____ * _____ = _____ _____ * _____ = _____

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Decimals, Fractions, and Mixed Numbers



1. Convert each decimal measurement to a mixed number.



Longest Road and Rail Tunnels in the U.S.	Decimal Length	Mixed-Number Length
Cascade Tunnel (Washington)	7.79 miles	_____ miles
Flathead Tunnel (Montana)	7.78 miles	_____ miles
Moffat Tunnel (Colorado)	6.21 miles	_____ miles
Hoosac Tunnel (Massachusetts)	4.7 miles	_____ miles
BART Transbay Tubes (San Francisco, CA)	3.6 miles	_____ miles

Source: *The Top 10 of Everything 2005*

2. The longest one-word name of any place in America is Chargoggagoggmanchauggagoggchaubunagungamaugg.

This name for a lake near Webster, Massachusetts, is 45 letters long. It is a Native American name that means "You fish on your side, I'll fish on mine, and no one fishes in the middle." Use this word to answer the problems below.

- a. What fraction of the word is made up of the letter *g*? _____ = _____
- b. What fraction of the word is made up of the letter *a*? _____ = _____
- c. What fraction of the word is made up of the letter *c*? _____ = _____

3. In the space above, write the decimal equivalents for the fractions in Problem 2.

Practice

4. $10\overline{)7,146} \rightarrow$ _____ 5. $10\overline{)84} \rightarrow$ _____ 6. $10\overline{)675} \rightarrow$ _____

Name _____

Date _____

Time _____

STUDY LINK
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Decimal Comparisons



Write three numbers between each pair of numbers.

1. 0 and 1 _____ , _____ , _____
2. 2 and 3 _____ , _____ , _____
3. 0.6 and 0.8 _____ , _____ , _____
4. 0.3 and 0.4 _____ , _____ , _____
5. 0.06 and 0.05 _____ , _____ , _____

Circle the correct answer to each question.

6. Which is closer to 0.6? 0.5 or 0.53
7. Which is closer to 0.3? 0.02 or 0.2
8. Which is closer to 0.8? 0.77 or 0.85
9. Which is closer to 0.75? 0.6 or $0.\overline{8}$
10. Which is closer to 0.04? 0.3 or 0.051
11. Arrange the decimals below in order from least to greatest.
0.12 0.05 0.2 0.78 0.6 0.043 0.1

Practice

12. $9 \overline{) \$63.54}$ _____
13. $45 \overline{) 287} \rightarrow$ _____
14. $7 \overline{) 567}$ _____
15. $7 \overline{) 4,861} \rightarrow$ _____

STUDY LINK
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Percent Problems



1. Convert the following fractions to decimals and percents. Round to the nearest whole percent.

Fraction	Decimal	Percent
$\frac{3}{4}$		
$\frac{14}{16}$		
$\frac{15}{25}$		
$\frac{17}{20}$		
$\frac{3}{8}$		

2. On the back of this page, explain how you could find the percent equivalent to $\frac{17}{20}$ without using a calculator.

3. Write the five fractions from Problem 1 in order from least to greatest.

4. Katie spent 50% of her money on shoes for soccer. The shoes cost \$65. How much money did Katie start with? _____

5. Tom got 70% of the questions correct on a music test. If he got 7 questions correct, how many questions were on the test? _____

Practice

6. $10 \overline{)975} \rightarrow$ _____

7. $20 \overline{)975} \rightarrow$ _____

8. $30 \overline{)975} \rightarrow$ _____

9. $40 \overline{)975} \rightarrow$ _____

STUDY LINK
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Graphs

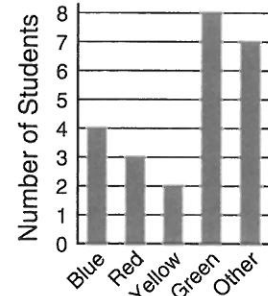
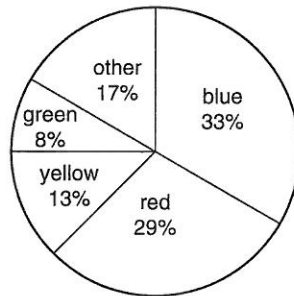
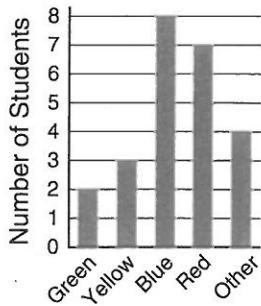


Brenda's class made a list of their favorite colors. Here are the results.



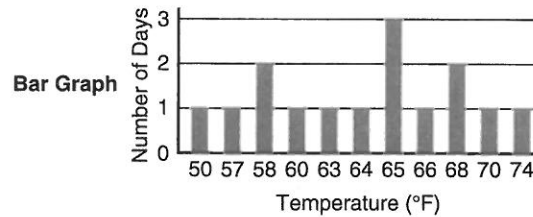
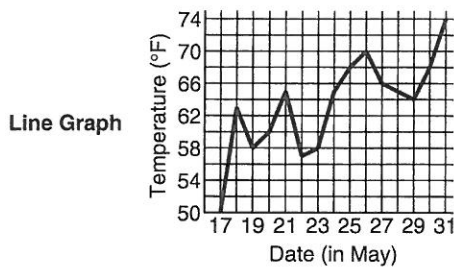
Blue 8 Red 7 Yellow 3 Green 2 Other 4

1. Circle each graph that correctly represents the data above. (There may be more than one.)



Marsha kept track of low temperatures. Here are the results for the end of May:

May 17	50°F	May 18	63°F	May 19	58°F	May 20	60°F
May 21	65°F	May 22	57°F	May 23	58°F	May 24	65°F
May 25	68°F	May 26	70°F	May 27	66°F	May 28	65°F
May 29	64°F	May 30	68°F	May 31	74°F		



2. Which graph do you think is more helpful for answering the question, "On how many days was the low temperature 65°F?" _____

3. Which graph do you think is more helpful for showing trends in the temperature for the last two weeks of May? _____

4. On the back of this page, explain your choices for Problems 2 and 3.

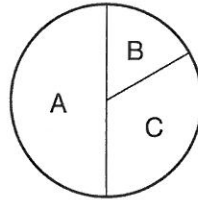
STUDY LINK
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Circle Graphs and Collecting Data

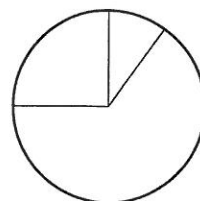
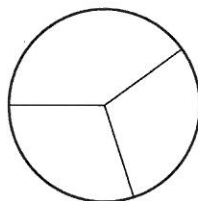
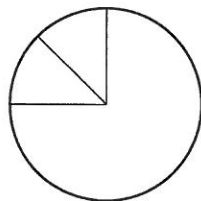
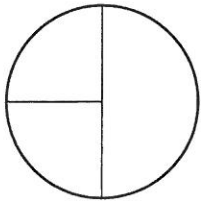


1. Estimate the percent of the circle for each piece of the graph at the right.

- a. A is about _____ of the circle.
- b. B is about _____ of the circle.
- c. C is about _____ of the circle.



2. Draw a line connecting each data set with the most likely circle graph.



30% of Michel's class walks to school.

25% of Jeannene's toy cars are blue.

$\frac{1}{8}$ of Angelo's pants are jeans.

30% of Michel's class rides the bus.

10% of Jeannene's toy cars are striped.

$\frac{1}{8}$ of Angelo's pants are black dress pants.

40% of Michel's class rides in a car or van.

65% of Jeannene's toy cars are red.

$\frac{3}{4}$ of Angelo's pants are blue dress pants.

3. Circle the graph above that you did not use. Write a set of data to match that circle graph.

Practice

4. $6 \overline{)3,798}$ _____

5. $7 \overline{)8.145}$ _____

6. $2 \overline{)21} \rightarrow$ _____

7. $8 \overline{)804} \rightarrow$ _____



The Number of States We've Been In

8. Talk with an adult at home and think of all the states you have visited. (Be sure to include the state you're living in.) Look at the map below to help you remember.

Use a pencil or crayon to mark each state you have visited.

Don't count any state that you have flown over in an airplane unless the plane landed, and you left the airport.

9. Count the number of states you have marked.

I have been in _____ states in my lifetime.

10. Now ask the adult to mark the map to show the states he or she has been in, using a different color or mark from yours.

Keep a tally as states are marked.

The adult I interviewed has visited _____ states.



Note: Alaska and Hawaii are not shown to scale.

Student and adult: This data is important for an upcoming lesson on data organization. Please bring this completed Study Link back to school tomorrow.

STUDY LINK
5•12
Finding “Fractions of”


Solve.

1. Tomas ate $\frac{3}{8}$ of a bag of 24 cookies.
Mona ate $\frac{2}{5}$ of a bag of 25 cookies.
Who ate more cookies?
Explain your answer.

2. On Thursday, 24 fifth-grade students came to school. That was only $\frac{2}{3}$ of the total class. The rest were home sick. How many students were sick?
Explain your answer.

3. Mario was on a 21-mile hiking trail. He walked $\frac{3}{7}$ of the trail before stopping for lunch. How far did he walk before lunch? Explain your answer.

Practice

4. $52 \overline{)156}$ _____

6. $13 \overline{)286}$ _____

5. $24 \overline{)576}$ _____

7. $22 \overline{)528}$ _____