The greatest common factor (GCF) of two or more numbers is the greatest number that is a factor of each number. One way to find the greatest common factor is to list the factors of each number and then choose the greatest common factors.

**EXAMPLE**

**Find the GCF of 36 and 48.**

factors of 36: 1, 2, 3, 4, 6, 9, 12, 18, 36
factors of 48: 1, 2, 3, 4, 6, 8, 12, 16, 24, 48

common factors: 1, 2, 3, 4, 6, 12

The GCF of 36 and 48 is 12.

Another way to find the GCF is to use the prime factorization of each number. Then identify all common prime factors and find their product.

**EXAMPLE**

**Find the GCF of 144 and 180.**

![Prime factorization trees for 144 and 180]

common prime factors: 2, 2, 3, 3

The GCF of 144 and 180 is $2 \times 2 \times 3 \times 3$, or 36.
EXERCISES  \textit{Find the GCF for each set of numbers.}

1. 18, 24  
2. 64, 40  
3. 60, 75  
4. 28, 52  
5. 54, 72  
6. 48, 72  
7. 63, 81  
8. 84, 144  
9. 72, 170  
10. 96, 216  
11. 225, 500  
12. 121, 231  
13. 240, 320  
14. 350, 140  
15. 162, 243  
16. 256, 640  
17. 9, 18, 12  
18. 30, 45, 15  
19. 81, 27, 108  
20. 16, 20, 36  
21. 98, 168, 196

APPLICATIONS

22. Sharanda is tiling the wall behind her bathtub. The area to be tiled measures 48 inches by 60 inches. What is the largest square tile that Sharanda can use and not have to cut any tiles?

23. Mr. Mitchell is a florist. He received a shipment of 120 carnations, 168 daisies, and 96 lilies. How many mixed bouquets can he make if there are the same number of each type of flower in each bouquet, and there are no flowers left over?

24. Students at Washington Middle School collected 126 cans of fruit, 336 cans of soup, and 210 cans of vegetables for a food drive. The students are making care packages with at least one of each type of canned good. If the students divide each type of canned good evenly among the care packages, what is the greatest number of care packages if there are no canned goods remaining?
**Least Common Multiple**

A multiple of a number is the product of that number and any whole number. The least nonzero multiple of two or more numbers is the least common multiple (LCM) of the numbers.

**EXAMPLE**

*Find the least common multiple of 6 and 8.*

- Positive multiples of 6: 6, 12, 18, 24, 30, 36, 42, . . .
- Positive multiples of 8: 8, 16, 24, 32, 40, 48, 56, . . .

The LCM of 6 and 8 is 24.

Prime factorization can also be used to find the LCM.

**EXAMPLE**

*Find the least common multiple of 9, 15, and 21.*

- $9 = 3 \times 3$
- $15 = 3 \times 5$
- $21 = 3 \times 7$

$$3 \times 3 \times 5 \times 7 = 315$$

The LCM of 9, 15, and 21 is 315.

**EXERCISES**

Find the LCM of each set of numbers by listing the multiples of each number.

1. 3, 4  
2. 10, 25  
3. 18, 24, 48

Find the LCM of each set of numbers by writing the prime factorization.

4. 35, 49  
5. 27, 36  
6. 10, 12, 15
Find the LCM of each set of numbers.

7. 16, 24  
8. 56, 16  
9. 28, 20

10. 64, 72  
11. 63, 77  
12. 110, 120

13. 66, 78, 90  
14. 40, 60, 108  
15. 132, 144, 156

16. 125, 275, 400  
17. 196, 225, 256  
18. 120, 450, 1500

19. Find the GCF and LCM of 36 and 54.
20. Find the two smallest numbers whose GCF is 7 and whose LCM is 98.
21. List the first five multiples of 6p.

APPLICATIONS

22. Suppose that your taxes, car insurance, and health club membership fees are all due in August. The taxes are due every three months, car insurance is due every six months, and health club membership is due every two months. Name the next month that all three bills will be due in the same month.

23. Antoine is buying hamburgers and buns for a class picnic. Hamburgers come in packages of 15 patties and buns come in packages of 8. Antoine wants to have the same number of hamburger patties and buns. What is the least number of hamburger patties and buns he can buy?

24. Members of the U.S. House of Representatives are elected every 2 years. United States Senators are elected every 6 years. The President of the United States is elected every 4 years. If a citizen voted for a representative, a senator, and the president in 2004, what is the next year in which the voter can vote for all three in the same year?
Adding and Subtracting Decimals

To add decimals, line up the decimal points. Then add the same way you
add whole numbers.

**EXAMPLES**

\[
\begin{align*}
16.45 + 18.62 &= 35.07 \\
77.3 + 88.45 + 90 &= 255.75
\end{align*}
\]

The sum is 35.07. The sum is 255.75.

To subtract decimals, line up the decimal points. Then subtract the same
way you would subtract whole numbers.

**EXAMPLES**

\[
\begin{align*}
45.63 - 15.47 &= 30.16 \\
134 - 105.67 &= 28.33
\end{align*}
\]

The difference is 30.16. The difference is 28.33.

**EXERCISES**

Find each sum or difference.

1. \[8.22 + 6.83\]  
2. \[17.532 - 8.173\]  
3. \[47.9 + 134.2\]

4. \[1.36 - 0.48\]  
5. \[0.817 - 0.6824\]  
6. \[68.7 + 1.47\]
7. \[
\begin{array}{c}
46 \\
- 4.49 \\
\hline
+ 10.08 \\
- 4.093 \\
\end{array}
\]

10. \(47.9 + 32.422\)

11. \(52.5 + 8.62\)

12. \(3 + 24.15 + 56.052\)

13. \(36 + 215.5 + 4.63\)

14. \(16.2 - 5.59\)

15. \(58 - 0.232\)

16. \(23 - 1.59\)

17. \(15.6 - 0.423\)

18. \(38 + 3.65\)

19. \(3.56 + 0.49\)

20. \(170 - 67.34\)

21. \(43.896 - 22.75\)

### APPLICATIONS

The results of the 2000 presidential election are given at the right. Use this information to answer Exercises 22–24.

22. What percent of the vote was cast for Bush or Gore?

23. How many more percentage points did Gore receive than Bush?

24. What percent of the vote was cast for listed candidates other than Gore or Bush?

25. Three pieces of cardboard are 0.125 inch, 0.38 inch, and 0.0634 inch thick. What is the combined thickness of all three pieces?

26. A weightlifter lifted 46.8 kilograms on his first lift. His next lift was 50 kilograms. How much more did he lift on his second lift than his first?

27. In a race, the first place finisher had a time of 29.14 seconds. The last-place finisher had a time of 35 seconds. What was the difference between the times?

### 2000 Presidential Elections

<table>
<thead>
<tr>
<th>Candidate</th>
<th>Percent (%) of Popular Vote</th>
</tr>
</thead>
<tbody>
<tr>
<td>Browne</td>
<td>0.36</td>
</tr>
<tr>
<td>Buchanan</td>
<td>0.42</td>
</tr>
<tr>
<td>Bush</td>
<td>47.87</td>
</tr>
<tr>
<td>Gore</td>
<td>48.38</td>
</tr>
<tr>
<td>Hagelin</td>
<td>0.08</td>
</tr>
<tr>
<td>Harris</td>
<td>0.01</td>
</tr>
<tr>
<td>Nader</td>
<td>2.74</td>
</tr>
<tr>
<td>Phillips</td>
<td>0.09</td>
</tr>
<tr>
<td>Write-In</td>
<td>0.02</td>
</tr>
<tr>
<td>Other</td>
<td>0.03</td>
</tr>
</tbody>
</table>

Source: *The World Almanac*
Multiply and Dividing Decimals

**EXAMPLE**

* Multiply 2.56 by 1.03.

\[
\begin{array}{c}
2.56 \quad \text{2 decimal places} \\
\times 1.03 \quad \text{2 decimal places} \\
\hline
768 \\
000 \\
256 \\
\hline
2.6368 \quad \text{4 decimal places}
\end{array}
\]

The sum of the decimal places in the factors is 4, so the product has 4 decimal places.

The product is 2.6368.

**EXAMPLE**

* Divide 0.201 by 0.3.

\[
\begin{array}{c}
0.67 \\
0.3\overline{0}.2.01 \\
\hline
0 \\
20 \\
18 \\
21 \\
21 \\
\hline
0
\end{array}
\]

Change 0.3 to 3 by moving the decimal point one place to the right.

Move the decimal point in the dividend one place to the right.

Divide as with whole numbers, placing the decimal point above the new point in the dividend.

The quotient is 0.67.

**EXERCISES**

* Multiply.

1. \[2.5 \times 1.3\]

2. \[6.92 \times 53\]

3. \[46.89 \times 0.06\]

4. \[925.1 \times 30.2\]

5. \[45.21 \times 3.2\]

6. \[164.24 \times 6.15\]
Divide.

10. $0.04 \div 0.92$
11. $0.7 \div 0.245$
12. $0.06 \div 0.204$

13. $0.63 \div 7.56$
14. $4.6 \div 115$
15. $8.1 \div 132.03$

16. $4.7 \div 43.381$
17. $0.68 \div 4.42$
18. $0.84 \div 25.62$

APPLICATIONS

19. Members of the student body ran 87.75 miles on a 0.25 mile track to raise money for charity. How many laps did they run?

20. A factory manager needs 3.25 yards of material to make a skirt. How many yards of fabric must be used to make 200 skirts?

21. Samantha worked 40.5 hours this week. She makes $9.50 per hour. How much money did she earn this week?

22. Batting averages are calculated to the nearest thousandth. Hikiro has 85 hits in 200 at bats. What is his batting average?

23. Joshua took a 37.5-mile boat trip. It took him 2.5 hours. What was the average speed of the boat?

24. Julia bought 3.5 pounds of mixed nuts that cost $7.49 per pound. How much did 3.5 pounds of nuts cost?
Adding and Subtracting Fractions

To add or subtract fractions with unlike denominators, rename the fractions so that they have a common denominator.

**EXAMPLES**

*Find each sum or difference.*

a. \[
\frac{1}{4} = \frac{2}{8} \\
+ \frac{5}{8} = \frac{5}{8} \\
\frac{7}{8}
\]

The sum is \(\frac{7}{8}\).

b. \[
\frac{1}{6} = \frac{5}{30} \\
+ \frac{7}{10} = + \frac{21}{30} \\
\frac{26}{30} = \frac{13}{15}
\]

The sum is \(\frac{13}{15}\).

c. \[
16\frac{1}{2} = 16\frac{7}{14} \\
+ 14\frac{5}{7} = + 14\frac{10}{14} \\
30\frac{17}{14} = 31\frac{3}{14}
\]

The sum is \(31\frac{3}{14}\).

d. \[
\frac{8}{9} - 1\frac{1}{3} \\
- \frac{1}{3} = - \frac{3}{9} \\
\frac{5}{9}
\]

The difference is \(\frac{5}{9}\).

e. \[
\frac{5}{6} - 3\frac{3}{8} \\
\frac{5}{6} = \frac{20}{24} \\
\frac{3}{8} = - \frac{9}{24} \\
\frac{11}{24}
\]

The difference is \(\frac{11}{24}\).

f. \[
6 - 3\frac{2}{5} \\
- 3\frac{2}{5} = - 3\frac{2}{5} \\
2\frac{3}{5}
\]

The difference is \(2\frac{3}{5}\).

**EXERCISES**

*Find each sum or difference.*

1. \[
\frac{1}{5} + \frac{1}{4} \\
\frac{9}{20}
\]

2. \[
\frac{5}{12} + \frac{1}{3} \\
\frac{5}{4}
\]

3. \[
\frac{1}{6} + \frac{3}{5} \\
\frac{23}{30}
\]

4. \[
\frac{7}{8} - \frac{1}{4} \\
\frac{5}{8}
\]

5. \[
\frac{7}{10} - \frac{3}{8} \\
\frac{13}{40}
\]

6. \[
\frac{11}{12} - \frac{1}{6} \\
\frac{5}{6}
\]
7. \( \frac{5}{4} \) + \( \frac{1}{3} \)
8. \( 11\frac{3}{4} \) + \( 8\frac{2}{3} \)
9. \( 13 \) + \( 9\frac{7}{8} \)

10. \( 15\frac{1}{2} \) + \( 9\frac{4}{5} \)
11. \( 12\frac{1}{2} \) − \( 8\frac{2}{3} \)
12. \( 14\frac{5}{8} \) − \( 6\frac{5}{6} \)

13. \( 18\frac{7}{8} \) − \( 13 \)
14. \( 11 - 3\frac{5}{9} \)
15. \( 16\frac{2}{5} - 13\frac{3}{4} \)

16. \( \frac{3}{10} + \frac{4}{15} \)
17. \( \frac{3}{8} + \frac{5}{12} \)
18. \( 18\frac{5}{18} - 8\frac{1}{9} \)

19. \( 2\frac{1}{4} + 3\frac{1}{2} + 5\frac{5}{6} \)
20. \( 15\frac{3}{4} + 12\frac{5}{16} + 10\frac{3}{8} \)
21. \( 21 + 8\frac{7}{10} + 14\frac{3}{4} \)

**APPLICATIONS**

22. Ashley spends \( \frac{1}{4} \) of her study time studying math and \( \frac{1}{6} \) of her time studying history. How much of her study time does she spend on math and history?

23. Hinto repaired her bike for \( \frac{5}{6} \) hour and then rode it for \( \frac{3}{5} \) hour. How much more time did she spend repairing her bike?

24. A tailor buys some cloth to make pants. He buys \( 3\frac{5}{6} \) yards of one type of fabric and \( 4\frac{7}{36} \) yards of another. How much fabric did he buy in all?

25. A park ranger led a group of campers on a \( 5\frac{1}{2} \)-mile hike. They have already hiked \( 2\frac{1}{3} \) miles. How far do they have yet to hike?
To multiply fractions, multiply the numerators and multiply the denominators.

**Example**

What is the product of $\frac{5}{6}$ and $\frac{9}{10}$?

\[
\frac{5}{6} \times \frac{9}{10} = \frac{5 \times 9}{6 \times 10} \quad \text{Multiply the numerators.}
\]
\[
= \frac{45}{60} \quad \text{or} \quad \frac{3}{4} \quad \text{Simplify.}
\]

The product is $\frac{3}{4}$.

To divide by a fraction, multiply by its reciprocal.

**Example**

What is the quotient of $\frac{4}{15}$ and $\frac{2}{5}$?

\[
\frac{4}{15} \div \frac{2}{5} = \frac{4}{15} \times \frac{5}{2} \quad \text{Multiply by the reciprocal of} \ \frac{2}{5} \ , \ \text{which is} \ \frac{5}{2}.
\]
\[
= \frac{4 \times 5}{15 \times 2} \quad \text{Multiply the numerators.}
\]
\[
= \frac{20}{30} \quad \text{or} \quad \frac{2}{3} \quad \text{Simplify.}
\]

The quotient is $\frac{2}{3}$.

**Exercises**

Multiply. Express each answer in simplest form.

1. $\frac{2}{3} \times \frac{1}{4}$
2. $\frac{3}{7} \times \frac{1}{2}$
3. $\frac{7}{10} \times \frac{5}{7}$

4. $\frac{5}{8} \times \frac{1}{4}$
5. $\frac{1}{6} \times \frac{3}{5}$
6. $\frac{4}{5} \times \frac{9}{10}$

7. $6 \times \frac{2}{3}$
8. $\frac{3}{5} \times 10$
9. $12 \times \frac{5}{16}$
Divide. Express each answer in simplest form.

10. $\frac{3}{4} \div \frac{1}{2}$  
11. $\frac{1}{5} \div \frac{1}{4}$  
12. $\frac{3}{8} \div \frac{3}{4}$  
13. $\frac{4}{5} \div \frac{2}{5}$  
14. $\frac{7}{8} \div \frac{1}{4}$  
15. $\frac{4}{7} \div \frac{8}{9}$  
16. $\frac{4}{9} \div \frac{2}{3}$  
17. $\frac{5}{9} \div 5$  
18. $20 \div \frac{3}{10}$

Find each product or quotient. Express each answer in simplest form.

19. $\frac{2}{3} \times \frac{5}{9}$  
20. $\frac{1}{6} \div \frac{2}{9}$  
21. $\frac{9}{10} \div \frac{1}{4}$  
22. $\frac{1}{15} \times 15$  
23. $\frac{15}{16} \div \frac{15}{16}$  
24. $\frac{4}{5} \times \frac{15}{24}$

APPLICATIONS

25. A piece of lumber 12 feet long is cut into pieces that are each $\frac{2}{3}$ foot long. How many short pieces are there?

26. About $\frac{1}{20}$ of the population of the world lives in South America. If $\frac{1}{35}$ of the population of the world lives in Brazil, what fraction of the population of South America lives in Brazil?

27. There is $\frac{1}{3}$ pound of peanuts in 2 pounds of mixed nuts. What part of the mixed nuts are peanuts?

28. Three fourths of an apple pie is left over from dessert. If the pie was originally cut in $\frac{1}{16}$ pieces, how many pieces are left?

29. A recipe calls for $\frac{1}{8}$ cup of sugar. Christopher is making half the recipe. How much sugar will he need?

30. Ms. Valdez has 2 dozen golf balls. She lost $\frac{1}{3}$ of them. How many golf balls does she have left?
Changing Fractions to Decimals

A fraction is another way of writing a division problem. To express a fraction as a decimal, divide the numerator by the denominator. If the division ends, or terminates, with a zero, the decimal is a terminating decimal.

**EXAMPLE**  Express $\frac{3}{4}$ as a decimal.

$\frac{3}{4}$ means $3 \div 4$ or $4 \div 3$.

\[
\begin{array}{c|c}
4 & 3.00 \\
\hline
28 & 0.75 \\
20 & \text{Annex zeros as needed.}
\end{array}
\]

So, $\frac{3}{4} = 0.75$.

If the decimal repeats a pattern in the digits rather than terminates, the decimal is a repeating decimal. You can use bar notation to show that a number repeats indefinitely. A bar is written over the digits that repeat.

**EXAMPLE**  Express $\frac{5}{6}$ as a decimal.

\[
\begin{array}{c|c}
6 & 0.8333 \\
\hline
48 & \text{The number 3 repeats.}
\end{array}
\]

So, using bar notation, $\frac{5}{6} = 0.8\overline{3}$. 
EXERCISES

Express each fraction as a decimal. Use bar notation if necessary.

1. \( \frac{3}{5} \)
2. \( \frac{2}{3} \)
3. \( \frac{1}{8} \)
4. \( \frac{2}{9} \)

5. \( \frac{4}{11} \)
6. \( \frac{1}{2} \)
7. \( \frac{3}{10} \)
8. \( \frac{3}{8} \)

9. \( \frac{5}{12} \)
10. \( \frac{4}{9} \)
11. \( \frac{7}{16} \)
12. \( \frac{17}{20} \)

13. \( \frac{1}{6} \)
14. \( \frac{28}{42} \)
15. \( \frac{17}{32} \)
16. \( \frac{13}{25} \)

17. \( \frac{63}{100} \)
18. \( \frac{19}{22} \)
19. \( \frac{37}{50} \)
20. \( \frac{49}{99} \)

21. \( \frac{81}{150} \)
22. \( \frac{267}{500} \)
23. \( \frac{370}{450} \)
24. \( \frac{784}{999} \)

APPLICATIONS

Ms. Breckenridge uses the grading scale shown at the right.

25. If a student gets \( \frac{19}{25} \) of the questions on a quiz correct, what was the student's score?

26. What grade should be given to a student who got 25 out of 30 questions correct if each question was worth the same value?

27. On the first quiz of the grading period, a student answered \( \frac{8}{9} \) of the questions correctly. On the second quiz, the student got 22 out of 25 questions correct. Which quiz had the higher score?
Percents as Fractions and Decimals

To write a percent as a fraction, write a fraction with the percent in the numerator and with a denominator of 100, \( \frac{r}{100} \). Then write the fraction in simplest form.

**EXAMPLES** Express each percent as a fraction.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a. 40%</td>
<td>b. 87(\frac{1}{2})%</td>
</tr>
<tr>
<td>(40% = \frac{40}{100})</td>
<td>(87\frac{1}{2}% = \frac{87\frac{1}{2}}{100})</td>
</tr>
<tr>
<td>(= \frac{2}{5})</td>
<td>(= \frac{175}{200})</td>
</tr>
<tr>
<td>Therefore, (40% = \frac{2}{5}).</td>
<td>Therefore, (87\frac{1}{2}% = \frac{7}{8}).</td>
</tr>
</tbody>
</table>

To express a percent as a decimal, first express the percent as a fraction with a denominator of 100. Then express the fraction as a decimal.

**EXAMPLES** Express each percent as a decimal.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a. 51%</td>
<td>b. 90.2%</td>
</tr>
<tr>
<td>(51% = \frac{51}{100})</td>
<td>(90.2% = \frac{90.2}{100})</td>
</tr>
<tr>
<td>(= 0.51)</td>
<td>(= \frac{90.2 \times 10}{100 \times 10})</td>
</tr>
<tr>
<td>Therefore, (51% = 0.51).</td>
<td>(= \frac{902}{1,000})</td>
</tr>
<tr>
<td>                                                                                                                                                                                                          Therefore, (90.2% = 0.902).</td>
<td></td>
</tr>
</tbody>
</table>
**EXERCISES**  Express each percent as a fraction.

1. 75%  
2. 84%  
3. 90%  
4. $18\frac{1}{2}\%$  
5. 38%  
6. $33\frac{1}{3}\%$  
7. 56%  
8. 60%

**Express each percent as a decimal.**

9. 82%  
10. 61.5%  
11. 8.9%  
12. $48\frac{1}{2}\%$  
13. 70%  
14. $27\frac{1}{4}\%$  
15. 3%  
16. 0.25%

**Write each percent as a fraction in simplest form and write as a decimal.**

17. 18%  
18. 22%  
19. $82\frac{1}{2}\%$  
20. $5\%$  
21. $91\frac{2}{3}\%$  
22. 19.6%  
23. 0.5625%  
24. 4.9%

**APPLICATIONS**

25. The average household in the United States spends 15% of its money on food. Express 15% as a decimal.

26. Bananas grow on plants that can be 30 feet tall. A single banana may be 75% water. Express 75% as a fraction and as a decimal.

27. In the United States, showers usually account for 32% of home water use. Express this percent as a fraction and as a decimal.

28. Only 2% of earthquakes in the world occur in the United States. Express this percent as a fraction and as a decimal.
Percent of a Number

To find the percent of a number, you can either change the percent to a fraction and then multiply, or change the percent to a decimal and then multiply.

**EXAMPLE**

Yankee Stadium in New York has a capacity of about 57,500. If attendance for one baseball game was about 90%, approximately how many people attended the game?

Change the percent to a decimal.

\[ 90\% = \frac{90}{100} \text{ or } 0.9 \]

Multiply the number by the decimal.

\[ 57,500 \times 0.9 = 51,750 \]

About 51,750 people attended the game.

**EXERCISES**

Find the percent of each number.

1. 50% of 48
2. 25% of 164
3. 70% of 90
4. 60% of 125
5. 55% of 960
6. 35% of 600
7. 15% of 120
8. 6% of 50
9. 200% of 13
10. 55% of 84
11. 16% of 48
12. 150% of 60
13. 45% of 80
14. 60% of 40
15. 18% of 300
16. 5% of 16
17. 15% of 50
18. 100% of 47
19. 12.5% of 60
20. 0.02% of 80
21. 0.5% of 180
22. 0.1% of 770
23. 1.4% of 40
24. 1.05% of 62
25. \(12\frac{1}{2}\)% of 70
26. \(5\frac{3}{8}\)% of 200
27. \(2\frac{1}{4}\)% of 150
28. \(33\frac{1}{3}\)% of 45

**APPLICATIONS**  
*Sarah has a part-time job. Each week she budgets her money as shown in the table. Use this data to answer Exercises 29–31.*

<table>
<thead>
<tr>
<th>Sarah’s Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>Savings</td>
</tr>
<tr>
<td>Lunches</td>
</tr>
<tr>
<td>Entertainment</td>
</tr>
<tr>
<td>Clothes</td>
</tr>
</tbody>
</table>

29. If Sarah made $90 last week, how much can she plan to spend on entertainment?

30. If Sarah made $105 last week, how much should she plan to save?

31. If Sarah made $85 last week, how much can she plan to spend on lunches?

32. The population of the U.S. was about 290 million people in 2004. The population of the New York Metropolitan area was about 7.3% of the total. About how many people lived in the New York area in 2004?

33. Ninety percent of the seats of a flight are filled. There are 240 seats. How many seats are filled?

34. Of the people Joaquin surveyed, 60% had eaten lunch in a restaurant in the past week. If Joaquin surveyed 150 people, how many had eaten lunch in a restaurant in the past week?

35. A car that normally sells for $25,900 is on sale for 84.5% of the usual price. What is the sale price of the car?