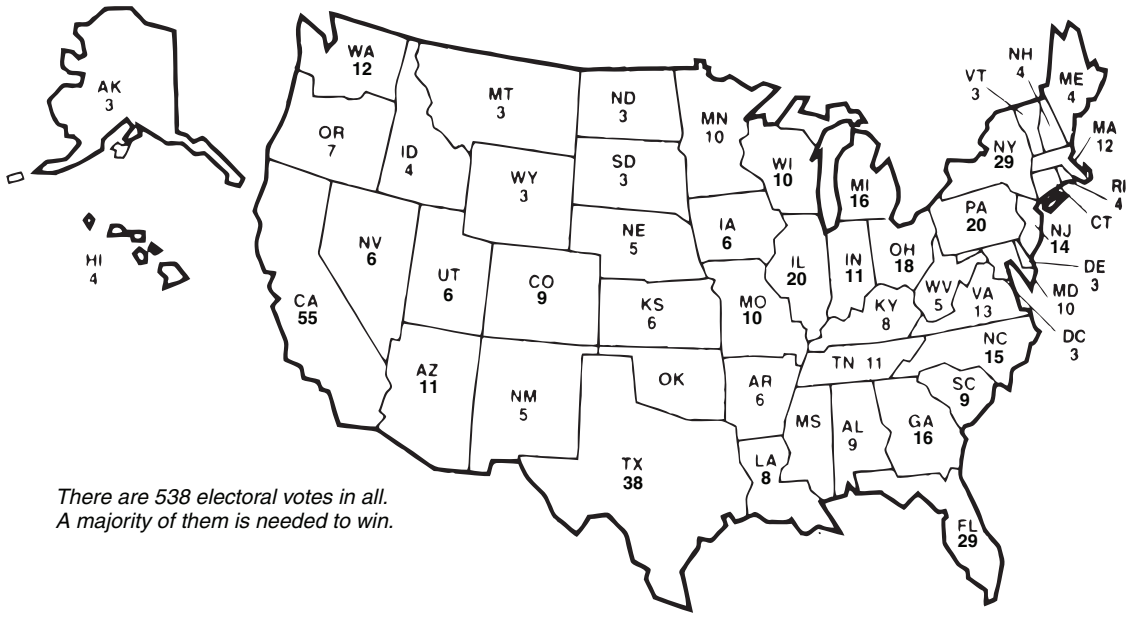
Name: _____ Date: _____

Presidential Playing Field

The president of the United States is elected by the *electoral college.* States with large populations have more electoral votes than states with small populations.

The candidate who receives the greatest number of popular votes in a state usually gets *all* of the state's electoral votes. To become president, a candidate must receive a *majority* (more than half) of the electoral votes. Since 1964 (when Washington, D.C., was added to the electoral college), the total number of electoral votes has been 538.

Electoral Votes for President
(based on the 2010 Census)



There are 538 electoral votes in all.
A majority of them is needed to win.

1. How many more electoral votes does New York (NY) have than New Jersey (NJ)? _____

2. How many fewer electoral votes does Florida (FL) have than Texas (TX)? _____

3. In 1944, California (CA) had only 25 electoral votes. How many electoral votes has it gained since then? _____

4. The six states with the most electoral votes are California, Texas, New York, Florida, Pennsylvania (PA), and Illinois, (IL).
   a. How many electoral votes do these six states have in all? _____
   b. How many electoral votes do the rest of the 44 states and Washington, D.C., have in all? _____

Use this table of selected presidential results to answer Questions 5–11.

Selected Presidential Elections

Year	Major Candidates	Popular Votes	Electoral Votes
1888	B. Harrison*	5,444,337	233
	G. Cleveland	5,540,050	168
1992	B. Clinton*	44,909,899	370
	G. Bush	39,104,545	168
	R. Perot	19,742,267	0
2000	George W. Bush*	50,456,169	271
	Al Gore	50,996,116	266
	Ralph Nader	2,831,066	0
2012	Barack Obama*	65,455,010	332
	Mitt Romney	60,771,703	206

(One member of the electoral college chose not to cast a vote for any candidate in 2000.)

*Indictates the winner

5. a. In 1888, who had more popular votes? _____

b. How many more? _____

c. Who had more electoral votes in 1888? _____

d. How many more? _____

e. Who won the 1888 election? _____

6. In which election year were the top two candidates closest in the . . .

a. number of popular votes received?

_____

b. number of electoral votes received? _____

7. Recall that 538 electoral votes are cast, and a *majority* of them are needed to win. What is the *fewest* number of electoral votes a candidate can have and still win: 268, 269, 270, or 271? _____

8. In 1992, a total of 104,426,659 popular votes were cast for all candidates. How many popular votes were not cast for Bill Clinton? _____

9. In 2000, suppose Gore (instead of Bush) had won New Hampshire's 4 electoral votes. Would that have given Gore enough electoral votes to win the election? _____

10. Barack Obama received 33 fewer electoral votes in 2012 than he received in 2008. How many electoral votes did he receive in 2008? _____

11. In 2012, a total of 1,000,812 more popular votes were cast for the top two candidates than in 2008. How many total popular votes were cast for the top two candidates in 2008? _____

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Can You Make the *Change*?

Here is how you can make change for a customer in a store:

- **a.** Begin with the *amount due*.
- **b.** Add amounts until reaching the *amount given to you* by the customer.
- **c.** Use the fewest possible pennies, nickels, dimes, quarters, and bills.

1. Suppose the *amount due* is \$0.32, and the *amount given to you* is \$1. In making change, you give the customer **3** pennies and say, "**\$0.35**." Then you give the customer **1** nickel and say, "**\$0.40.**"

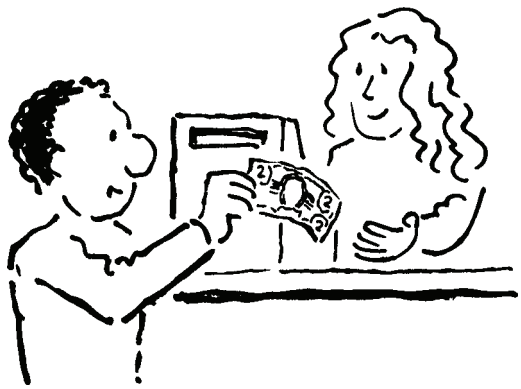
Then you give the customer _____ dime and say, "_____."
Finally, you give the customer _____ quarters and say, "_____."
The amount of change is \$0.03 + \$0.05 + \$0.10 + \$0.50, or \$_____.

Complete the following:

2.

Amount due: **\$1.18**
Amount given to you: **\$2**

Change	**What you say**
_____ pennies	_____
_____ nickel(s)	_____
_____ dime(s)	_____
_____ quarter(s)	_____
The amount of change is **\$** _____	



	Amount Due	**Amount Given to You**	**Change**						**Amount of Change**
			\$0.01	**\$0.05**	**\$0.10**	**\$0.25**	**\$1.00**	**\$5.00**	
3.	\$2.37	\$5.00	3	0	1	2	2	0	
4.	\$0.84	\$1.00							
5.	\$0.29	\$1.00							
6.	\$2.33	\$3.00							
7.	\$1.78	\$5.00							
8.	\$4.02	\$10.00							
9.	\$5.41	\$10.00							
10.	\$14.58	\$20.03							

Name: _____ Date: _____

Editor for a Day: Fractions

This page will be part of a mathematic book. Suppose you are the books editor. Your to correct all errors that you can find. Their are errors in math (the answers are given in bold type), spelling, grammer, and more. Have you already found some misteaks.

In 1–9, add, subtract, multiply, or divide. Write eachanswer is simplest form.

1. $\frac{3}{10} + \frac{7}{10} = \mathbf{\frac{10}{20} = \frac{1}{2}}$

2. $\frac{5}{8} - \frac{2}{4} = \mathbf{\frac{3}{8}}$

3. $\frac{5}{6} \times \frac{5}{6} = \mathbf{\frac{25}{36} = \frac{5}{6}}$

4. $\frac{5}{6} \div \frac{3}{4} = \mathbf{\frac{\cancel{5}^{1}}{\cancel{6}_{2}} \div \frac{\cancel{3}}{4} = \frac{5}{2} \times \frac{4}{1} = \frac{20}{2} = 10}$

5. $3\frac{1}{2} \times 2\frac{1}{4} = \mathbf{6\frac{1}{8}}$

6.
$$\begin{array}{r} 4\frac{5}{6} \\ +\ 1\frac{1}{6} \\ \hline 6 \end{array}$$

7.
$$\begin{array}{r} 6\frac{3}{8} \\ +\ 2\frac{5}{6} \\ \hline \end{array} \longrightarrow \begin{array}{r} \mathbf{6\frac{9}{24}} \\ \mathbf{+\ 2\frac{20}{24}} \\ \hline \mathbf{8\frac{29}{24}} \end{array}$$

8.
$$\begin{array}{r} 5\frac{2}{3} \\ -\ 3\frac{3}{4} \\ \hline \end{array} \longrightarrow \begin{array}{r} \mathbf{\cancel{5}^{4}\ \cancel{\frac{8}{12}}^{18}} \\ \mathbf{-\ 3\frac{9}{12}} \\ \hline \mathbf{1\frac{9}{12} = 1\frac{3}{4}} \end{array}$$

9.
$$\begin{array}{r} 7 \\ -\ 2\frac{3}{4} \\ \hline \mathbf{5\frac{3}{4}} \end{array}$$

In 11–13, solve each problem.

10. This year, thanks to the affects of good whether proffits at a garden shop were $\$3\frac{1}{2}$ million. This is $\$1\frac{5}{8}$ million more than the profits last year. What were the prophets last year?

$\$5\frac{1}{8}$ million

11. A boss orders four pizzas to improve employe moral. The boss' assumption is that each person will eat $\frac{1}{8}$ pizza.. How many people will the four pizzas serve.

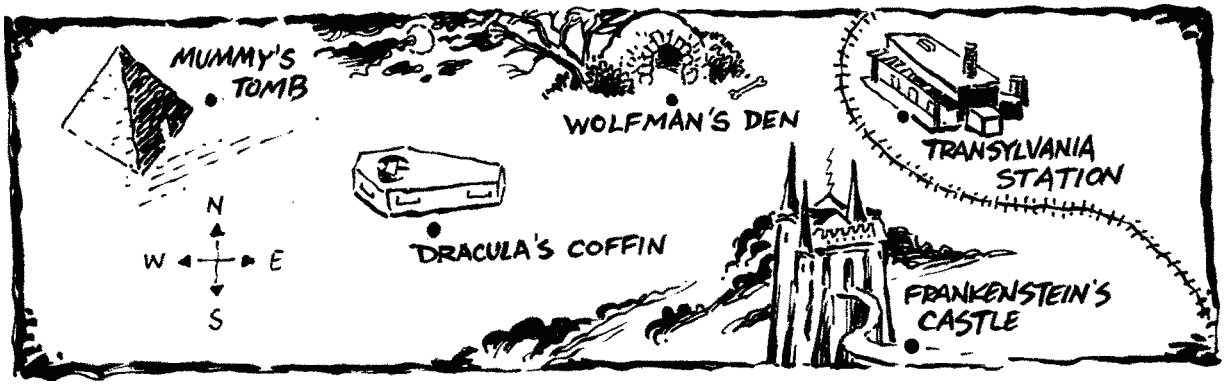
$\frac{1}{2}$

12. The principle's office is rectangular. It has an area of 230 feet, with a with of $11\frac{1}{2}$ feet. Find the length of the office?

2,645 feet

Name: _____ Date: _____

Monster Math



Scale: 1 cm = 80 km

In Questions 1–3, use a centimeter ruler to find **(a)** each map distance to the nearest tenth centimeter. Then multiply each map distance by 80 to find **(b)** the land distance in kilometers.

1. Mummy's Tomb to Wolfman's Den

a. _____ cm

b. _____ km

2. Wolfman's Den to Dracula's Coffin

a. _____ cm

b. _____ km

3. Mummy's Tomb to Frankenstein's Castle

a. _____ cm

b. _____ km

4. A monster is on the prowl! To find it, begin at Transylvania Station and go 240 km south. Then go 360 km northwest. Finally, go 280 km southwest. The monster is at _____.

5. Find **(a)** the map distance from Chicago to Denver. Then find **(b)** the actual distance.

a. _____ (on map)

b. _____ (actual)

Scale: 1 cm = 560 km

6. What is the actual distance from San Francisco to Houston? _____

7. What is **(a)** the map distance from Los Angeles to Detroit to New York? What is **(b)** the actual distance of that trip?

a. _____ (on map)

b. _____ (actual)

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Planely Algebra

United Airlines Flights Departing from Chicago		
Flight	**Gate-to-Gate Minutes***	**Miles**
to Boston	129	867
to Cleveland	65	316
to Dallas	128	802
to Denver	150	901
to Detroit	68	235
to Indianapolis	51	177
to Nashville	84	409
to New Orleans	125	837
to New York City	119	733
to Orlando	156	1,005
to Toronto	85	437
to Washington, DC	103	612

*This is the combined time a plane spends on the runways taxiing and the time it spends in flight.

1. Graph the data points from the table above. Use the grid on the next page. Graph the "Gate-to-Gate Minutes" as the *x* values; graph the "Miles" as the *y* values. Scale the *x*-axis in intervals of 10 minutes. Do not connect the points on the graph. The graph you are making is called a *scatterplot.*

2. Notice that the data points are close to being on a line. We can *fit a line to the data* by using a ruler to draw a line that comes as close as possible to as many dots as possible. Use a ruler to draw such a line. Extend the line so that it crosses the *x*-axis. _____

3. You can use your line to help make some predictions for flights not given in the table.

a. Estimate the miles for a flight that takes 170 gate-to-gate minutes. _____

b. Estimate the gate-to-gate minutes for a 500-mile flight. _____

4. **a.** Estimate how much change there is in the height of your line (along the *y*-axis) for every change of 10 minutes (along the *x*-axis). This will give you the approximate distance a plane travels in 10 minutes. _____

b. Divide your result in **Question 4a** by 10 to find the speed of a plane in miles per minute. This result, the change in the height of a line for every change of 1 unit to the right, is called the *slope* of the line. _____

5. a. What is the ordered pair for the point where your line crosses the *x*-axis? The *x*-coordinate of that point is called the *x-intercept.* _____

b. What are the airplanes doing during the time represented by the *x*-intercept? _____