Multiply and divide the following fractions. Cross cancel whenever possible. When dividing, remember to flip before you cancel.

1.  $\frac{8}{16} \times \frac{8}{10} =$ 2.  $\frac{3}{48} \times \frac{6}{21} =$ 3.  $\frac{7}{12} \times \frac{6}{10} =$ 4.  $\frac{2}{10} \times \frac{5}{24} =$ 5.  $\frac{8}{56} \div \frac{4}{7} =$  $6. \qquad \frac{9}{64} \div \frac{3}{8} =$ 7.  $\frac{5}{42} \div \frac{2}{6} =$ 8.  $\frac{7}{35} \div \frac{1}{7} =$ 9.  $\frac{3}{24} \div \frac{3}{6} =$ 10.  $\frac{9}{27} \div \frac{3}{9} =$ 

# CHAPTER 1 REVIEW TEST

Solve the following problems. Reduce all answers down to the smallest denominator. Convert all improper fractions into mixed numbers.

- 1.  $\frac{1}{8} + 2\frac{3}{8} =$
- 2.  $3\frac{4}{6} + \frac{1}{5} =$
- 3.  $\frac{5}{8} \frac{1}{16} =$
- 4. 5  $\frac{5}{12}$  2  $\frac{3}{4}$  =
- 5.  $2\frac{5}{8} \times 3 =$
- 6.  $3\frac{4}{8} \div 4 =$
- 7. I have a stack of baseball cards that measures  $\frac{1}{2}$  inch high. Your stack of baseball cards is  $\frac{1}{8}$  inch taller than mine. How tall is your stack of cards?
- 8. Brendon cut a sandwich into 8 pieces. John ate one of the pieces. How much of a sandwich does he have left?
- 9. There is a recipe for 4 dozen cookies on the next page. We want to make only 2 dozen, so we need to cut the recipe in half. Rewrite the amounts needed to make half the recipe.

$$2\frac{1}{4}$$
 Cups of flour

- $\frac{3}{4}$ Cup sugar $\frac{1}{2}$ Cup brown sugar $\frac{2}{3}$ Cup butter2Eggs1Teaspoon baking soda $\frac{1}{3}$ Tablepoon salt $\frac{1}{4}$ Teaspoon vanilla
- 10. A newspaper costs 8/10 of a dollar. How much does it cost?
- 11. Kathy wants to hang a picture in the center of a wall. The wall measures 37 3/4" wide. She needs to find the center of the wall. Half of 37 3/4" would be the center. How far from the edge of the wall should Kathy measure, to make sure the nail is in the center of the wall?
- 12. Write a fraction to show what line the arrow is pointing to.



1. Fill in the blank boxes below.

Fraction	Decimal pt.	Percentage
<u>1</u> 2		50%
8/10	.80	
	.32	32%
1/100		1%
2/10	.2	
		99%
7/100		
	.33	
		10%

- 2. How much is 10% of a dollar?
- 3. Write 56 cents as a fraction. Reduce your answer.
- 4. Write  $\frac{1}{2}$  as a decimal number.
- 5. There are 342 jelly beans in a jar. 50% of them are blue. How many blue jelly beans are in the jar?
- 6. How many years are in a **cent**ury?
- 7. How many cents are in a dollar?
- 8. What does the word percent mean?
- 9. There were 100 people in the room. 99 of them were under the age of 70. What percentage of the people in the room were over age 70?

How much is 10% of:

- 1. 100
- 2. 80
- 3. 75
- 4. 850
- 5. 962

How much is 25% of:

- 6. 100
- 7. 12
- 8. 40
- 9. 200
- 10. 16
- 11. Write .25 as a fraction. Reduce your answer.
- 12. Write .50 as a fraction. Reduce your answer.
- 13. Write one tenth as a percentage.
- 14. How much is 10% of 2,457?
- 15. How much is 10% of one million?

16. How much is 10% of a dollar?

- 17. Judy bought a case of ice tea. There are 10 bottles of tea in each case. She put 20% of them in the refrigerator. How many bottles did Judy put in the refrigerator?
- 18. Daryl went fishing. He caught 40 fish. 50% of the fish weighed over 10 pounds. How many fish weighed less than 10 pounds?
- 19. Marion took her dog out for a 2 hour walk. Marion's dog was on the leash 50% of the time. How long was her dog on a leash?
- 20. Chuck is 70 years old. He has lived in Seattle 50% of his life. How long has he lived in Seattle?

Use my method to find 20% of the following numbers. First, move the decimal point over one space, then double that number to get 20%.

- 1. 400
- 2. 300
- 3. 50
- 4. 100
- 5. 800
- 6. What is 10% of 200?
- 7. What is 20% of 300?
- 8. What is 30% of 400?
- 9. What is 40% of 100?
- 10. What is 50% of 220?
- 11. What is 60% of 300?
- 12. What is 75% of 320?
- 13. What is 80% of 800?
- 14. What is 90% of 1000?
- 15. What is 100% of a million?
- 16. The sign says all shoes are 40% off. The original price for the shoes you want to buy is \$35.00. How much will the shoes cost during the sale?
- 17. Stephen went to a restaurant. The total price for dinner was \$75.00. Stephen left a 20% tip. How much was the tip?
- 18. Eric painted his motorcycle helmet 3 different colors. There is green paint on 25% of the helmet. There is yellow paint on 50% of the helmet. What percentage of the helmet is white?
- 19. Mike bought a guitar at 50% off the regular price. The regular price was \$299.00. Approximately how much did Mike spend on his guitar?

#### Date:

#### WORKSHEET 2-19

- 1. What is 33% of 154?
- 2. 62% of 38 is what?
- 3. How much is 23% of 55?
- 4. What is 93% of 18?
- 5. What is 42% of 9?
- 6. I received 80% of the 1,045 votes. How many votes did I get?
- 7. Courtney was reading the reviews of 2 different video games. The first game, Flip-Flop, reported that 85% of the 432 people who played the game, liked it. The review of the other game, Tisk-Task, reported that 97% of the 40 people who played it, liked it. How many people liked each game? You will need to round your answer to the nearest whole number.
- 8. Chris received a paycheck of \$759.00. Here is how he spent it:

15% was spent on his car, gas, and insurance.25% was spent on groceries.30% was put towards rent.10% went into his savings account.

How much did he spend on each item above? What percentage of his check does he have left?

9. Cammy wanted to buy a pair of shoes. The brown shoes were regularly \$42.00, but she had a coupon for 15% off the regular price. The black pair of shoes were regularly priced at \$54.00, but they were on sale for 30% off the regular price. Which pair of shoes cost less?

## CHAPTER 2 REVIEW TEST

1. Fill in the empty boxes below making each row equal.

Decimal	Fraction	Percentage
.02		2%
.20	$\frac{1}{5}$	
.5		
		99%
	$\frac{33}{100}$	
.18		
1.10		

2. How much money is in the picture? Write your answer as a decimal number, a fraction, and as a percentage of a dollar.



Decimal Number

Fraction

Percentage of a Dollar

## Chapter 2 Review Test page 2

- 3. What is 14% of 50?
- 4. How much is 29% of 600?
- 5. How much is 20% of 200?
- 6. How many decimal points are in the number one million, six-hundred thousand?
- 7. An hour is 60 minutes. How much is 20% of an hour?
- 8. What is 400% of 62?
- 9. 50 people showed up to the concert. 100% of the people were wearing the band's T-shirts. How many people were wearing the T-shirts?
- 10. Senior Citizens get 15% off on Wednesdays. Anita is a senior citizen and on Wednesday she saved \$15 dollars. Can you logically figure out how much Anita's items would have been without the discount?
- 11. Kahlum's monthly cell phone bill showed that he sent a total of 2,316 text messages. Annabelle received about 45% of the messages and Nina received around 33% of them. The rest of the messages were sent to Trent. Fill in the number of text messages each person received from Kahlum.

Annabelle:	
Nina:	
Trent:	

Check your answers. If you got more than 2 wrong, read chapter 2 again.

Date:

#### WORKSHEET 2-20

- 1. 14 + -10 =
- 2. -15 + 30 =
- 3. -40 + -40 =
- 4. (-10) + (-20) =
- 5. -45 + 25 =
- 6. 100 + -50 =
- 7. -35 + -35 =
- 8. 25 + 25 =
- 9. -25 + 25 =
- 10. +30 + -60 =
- 11. Sherry owes Mike \$500. She owes Eric \$600. How much money does Sherry have now?
- 12. Stephen gave Logan \$25.00. Logan owes his mom \$38.00. How much money does Logan have now?
- 13. Kaylie received \$55.00 for babysitting. She owes her brother \$5.00 and she owes her sister \$8.00. How much money does Kaylie have now?
- 14. My bank account had \$17.00 in it yesterday. I just went to the ATM and took out\$40.00. How much money is in my bank account now?
- 15. Yesterday, the temperature in Alaska was 7 degrees. Today it is 5 degrees below zero. How much colder is it today than yesterday?
- 16. Tia owes her dad \$10.00 and she owes her brother \$6.00. How much money does Tia have?

1.	8020 =
2.	-40 - 20 =
3.	-1010 =
4.	-255 =
5.	1005 =
6.	100 - 50 =
7.	-10080 =
8.	-10 - 5 =
9.	-25 - 25 =
10.	-32104 =
11.	$-\frac{7}{8}+-\frac{1}{8}=$
12.	$\frac{7}{12}\frac{2}{24} =$
13.	$-\frac{2}{5}\frac{4}{15}=$
14.	$-\frac{2}{9}+\frac{1}{2}=$
15.	$-4\frac{3}{5}-2\frac{1}{3}=$
16.	$5\frac{1}{2} + -2\frac{4}{7} =$
17.	$-3\frac{5}{8}3=$

18. -.03 + -.63 =

If you made any mistakes, learn from them or read this chapter again. You shouldn't continue unless you understand adding and subtracting negative and positive numbers completely.

1.	$-3 \times 3 =$
2.	$5 \times -5 =$
3.	$-7 \times -2 =$
4.	$8 \times -5 =$
5	$-9 \times -6 =$
6.	$10 \times -3 =$
7.	$-4 \times -6 =$
8.	$-1 \times -1 =$
9.	$-2 \times 1 =$
10.	$-3 \times 8 =$
11.	$\frac{1}{3} \times -\frac{1}{4} =$
12.	$-\frac{3}{5} \times \frac{5}{6} =$
13.	$-1\frac{3}{7} \times -3\frac{1}{4} =$
14.	$-6 \times \frac{5}{8} =$
15.	$-3\frac{7}{8} \times -5 =$
16.	$3\frac{3}{4} \times -4\frac{1}{2} =$
17.	-1.55 × 7.2 =
18.	$-3.007 \times -6.4$
19.	$9.1 \times05 =$

=

- 1.  $10 \div -5 =$
- 2.  $-56 \div -7 =$
- 3.  $-49 \div 7 =$
- 4.  $64 \div -8 =$
- 5.  $28 \div -4 =$
- 6.  $-81 \div -9 =$
- 7.  $36 \div -2 =$
- 8.  $-48 \div -8 =$
- 9.  $-144 \div -12 =$
- 10. 44 ÷ 11 =
- 11.  $-\frac{2}{3} \div -\frac{4}{5} =$
- 12.  $1\frac{1}{4} \div -\frac{1}{3} =$
- 13.  $-3\frac{1}{8} \div -2\frac{4}{8} =$
- 14. Mick had some custom T-shirts made for his band. The shirts cost \$96.00. Mick and the band only saved up \$78 for the shirts. After he pays for the shirts, how much money will the band have?

1.	-9 + 14 =	2.	-43 + -81 =	3.	90 + -45 =
4.	-1.05 + 9.6 =	5.	$-\frac{3}{5}+-\frac{2}{10}=$	6.	432 - 987 =
7.	-175 =	8.	-23 - 14 =	9.	104 – 16 =
10.	$-4\frac{1}{2}3\frac{1}{3} =$	11.	$5\frac{1}{8}2\frac{1}{4} =$	12.	.023 - 5.2 =
13.	$-5 \times 8 =$	14.	7 × -3 =	15.	$-10 \times -90 =$
16.	$\frac{7}{8} \times -\frac{5}{6} =$	17.	32.16 × -3 =	18.	$-14 \times \frac{1}{2} =$
19.	$-75 \div -3 =$	20.	$-150 \div 2 =$	21.	56 ÷ -7 =
22.	$\frac{7}{12} \div - \frac{2}{3} =$	23.	$-\frac{6}{24} \div -\frac{18}{24} =$	23.	$-1008 \div 9\frac{3}{9} =$

24. Keep track of Melodee's money. She received \$100 for her birthday. She spent \$41.39 at the store. She went to the gas station and spent \$44.91 putting gas in her car. She received \$25.00 for babysitting and gave her little brother \$5.00 for washing her car. How much money does Melodee have left?

### FINAL TEST

Solve the following fraction problems. Reduce your answers to the smallest denominator possible and convert any improper fractions into mixed numbers.

- 1.  $2\frac{3}{8} + 3\frac{19}{24} =$
- 2.  $4\frac{3}{7} 5\frac{4}{8} =$
- 3.  $6\frac{3}{4} \times -7\frac{1}{4} =$
- $4. \qquad -4\frac{1}{12} \div -\frac{21}{36} =$
- 5. Which fraction is bigger? Cross multiply and then use a < or > sign.

32	48
44	 55

- 6. Chris bought a bag of chocolate candies. The bag had 20 pieces of candy in it. Chris gave Nick 5 of the pieces and he gave Tony 8 of the pieces.
- a. Write a fraction that shows how much of the bag he gave to Nick.
- b. Write a percentage to show how much of the bag he gave to Tony.
- c. Write a decimal number to show how much of the candy Chris has left. (Hint: write a fraction and then divide the numbers).

# FINAL TEST page 2

7. Fill in the empty box to make all values equal.

Decimal number	Fraction	Percentage
	$\frac{26}{26}$	

Find the arrow and name the measurement:



## FINAL TEST page 3

- 12. Jessi wants to fill a baby bottle for Annabelle. The directions say to use 1 fluid ounce of the powdered mix and 8 fluid ounces of water. Jessi only has a tablespoon to use for measuring. How many tablespoons of each ingredient should Jessi use?
- 13. Name 4 units of measurement used to measure length. Arrange them in order from smallest to biggest.
- 14. Name 7 units of measurement used to measure liquids or space. Arrange them in order from smallest to biggest.
- 15. Name 3 units of measurement used to measure weight. Arrange them in order from the smallest to biggest.
- 16. What is 30% of 12?
- 17. What is 23% of 90?
- 18. Stephen sells used cars. Every time he sells a car, he earns 12% of the price of the car. Stephen sold a car for \$7,225. How much will he be paid?
- 19. Many lawn mowers run with gas and oil mixed together. The directions say to mix the gas and oil at a rate of 32 to 1. That means you need to add 1 unit of oil for every 32 units of gas. Sherry wants to add oil to 1 quart of gas. How much oil should she add?

If you got 100% correct on the Final Test, congratulations you are ready for prealgebra. If you missed more than 2, I strongly encourage you to read this chapter again. Or at least learn from your mistakes.