## WORKSHEET 2-15

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. $\frac{9}{64} \div \frac{3}{8}=$
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.
$2 \frac{1}{4} \quad$ Cups of flour

| $\frac{3}{4}$ | Cup sugar |
| :--- | :--- |
| $\frac{1}{2}$ | Cup brown sugar |
| $\frac{2}{3}$ | Cup butter |
| 2 | Eggs |
| $\frac{1}{1}$ | Teaspoon 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 $3 / 4^{\prime \prime}$ wide. She needs to find the center of the wall. Half of $373 / 4^{\prime \prime}$ 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.


## WORKSHEET 2-16

1. Fill in the blank boxes below.

| Fraction | Decimal pt. | Percentage |
| :--- | :--- | :--- |
| $\frac{1}{2}$ |  | $50 \%$ |
| $8 / 10$ | .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 century?
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?

## WORKSHEET 2-17

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?

## WORKSHEET 2-18

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?

## 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.


## 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:
$\qquad$
Trent:

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

## 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?

## WORKSHEET 2-21

1. $80--20=$
2. $-40-20=$
3. $-10--10=$
4. $-25--5=$
5. $100--5=$
6. $100-50=$
7. $-100--80=$
8. $-10-5=$
9. $-25-25=$
10. $-32--104=$
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' $\dagger$ continue unless you understand adding and subtracting negative and positive numbers completely.

## WORKSHEET 2-22

1. $-3 \times 3=$
2. $5 \times-5=$
3. $-7 \times-2=$
4. $8 \times-5=$
$5-9 \times-6=$
5. $10 \times-3=$
6. $-4 \times-6=$
7. $-1 \times-1=$
8. $-2 \times 1=$
9. $-3 \times 8=$
10. $\frac{1}{3} \times-\frac{1}{4}=$
11. $-\frac{3}{5} \times \frac{5}{6}=$
12. $-1 \frac{3}{7} \times-3 \frac{1}{4}=$
13. $-6 \times \frac{5}{8}=$
14. $-3 \frac{7}{8} \times-5=$
15. $3 \frac{3}{4} \times-4 \frac{1}{2}=$
16. $-1.55 \times 7.2=$
17. $-3.007 \times-6.4=$
18. $9.1 \times-.05=$

## WORKSHEET 2-23

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. $44 \div 11=$
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?

## CHAPTER 3 REVIEW TEST

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. $-17--5=$
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. $7 \times-3=$
15. $-10 \times-90=$
16. $\frac{7}{8} \times-\frac{5}{6}=$
17. $32.16 \times-3=$
18. $-14 \times \frac{1}{2}=$
19. $-75 \div-3=$
20. $-150 \div 2=$
21. $56 \div-7=$
22. $\frac{7}{12} \div-\frac{2}{3}=$
23. $-\frac{6}{24} \div-\frac{18}{24}=$
24. $-1008 \div 9 \frac{3}{9}=$
25. 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. $-4 \frac{1}{12} \div-\frac{21}{36}=$
5. Which fraction is bigger? Cross multiply and then use $a<$ or $>$ sign.

$$
\frac{32}{44}-\frac{48}{55}
$$

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 <br> number | Fraction | Percentage |
| :--- | :--- | :--- |
|  | $\frac{26}{26}$ |  |
|  |  |  |

Find the arrow and name the measurement:
8.

9.

10.

11.


## 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.

