

Grade 8 Summer Math Fractions

Name _____

Date _____

Add. Remember to find a common denominator first. Simplify to reduce your answer to lowest terms. Show your work.

1. $\frac{2}{3} + \frac{5}{9} =$

2. $\frac{5}{6} + \frac{7}{12} =$

3. $7\frac{3}{5} + 2\frac{1}{2} =$

4. $17\frac{14}{15} + 2\frac{9}{10} =$

Subtract. Remember to find a common denominator first. Simplify to reduce your answer to lowest terms. Show your work.

5. $\frac{4}{5} - \frac{3}{4} =$

6. $\frac{11}{15} - \frac{2}{5} =$

7. $8\frac{1}{6} - 7\frac{3}{4} =$

8. $6 - 2\frac{8}{11} =$

Multiply. Remember to multiply across numerators and multiply across denominators. Remember to change mixed numbers to improper fractions first. Simplify to reduce your answer to lowest terms. Show your work.

9. $\frac{3}{5} \cdot \frac{1}{3} =$

10. $\frac{5}{6} \cdot \frac{2}{5} =$

11. $8\frac{1}{3} \cdot \frac{3}{4} =$

12. $1\frac{5}{7} \cdot 2\frac{1}{4} =$

Divide. Remember to flip the second fraction, then multiply across numerators and multiply across denominators. Remember to change mixed numbers to improper fractions first. Simplify to reduce your answer to lowest terms. Show your work.

13. $\frac{3}{7} \div \frac{1}{2} =$

14. $\frac{7}{8} \div \frac{3}{4} =$

15. $6\frac{2}{3} \div 5 =$

16. $9\frac{3}{8} \div 3\frac{3}{4} =$

Grade 8 Summer Math Fraction Word Problems

Name _____

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Show your work.

1. In order to make your costume for the school play, you need $\frac{2}{9}$ yard of fabric for the pants and $\frac{1}{2}$ yard fabric for a matching jacket. How much fabric do you need for the costume?

2. In a science experiment, Plant A grew $1\frac{3}{4}$ inches one week and $1\frac{5}{8}$ inches the next week. How many inches did it grow during the two weeks?

3. A recipe calls for $\frac{3}{4}$ cup of shredded cheese. If you have $\frac{1}{8}$ cup, how much more do you need to shred?

4. On Monday, a comet was visible for $3\frac{5}{6}$ hours. Three days later, it was visible for only $1\frac{3}{4}$ hours. For how much less time was the comet visible on Thursday?

5. On Tuesday, 35 students bought hot lunch. $\frac{3}{5}$ of them bought milk. How many students bought milk?

6. A recipe for oatmeal cookies calls for $1\frac{3}{4}$ cup of raisins. If you only want to make $\frac{1}{2}$ a batch, how many cups of raisins should you use?

7. Miss Suzie uses $\frac{1}{8}$ pound of cheese for each sandwich she makes. How many sandwiches can she make with a 5-pound block of cheese?

8. If you bought $7\frac{1}{2}$ pounds of gumballs and divided them up into baggies that weighed $\frac{3}{4}$ pound each. How many baggies would you be able to fill?

Grade 8 Summer Work Decimals

Name _____

Date _____

Add. Remember to line up the decimal points. Show your work.

1. $3.5 + 8.4 =$

2. $43.57 + 104.6 =$

3. $19 + 0.08 =$

4. $22.63 + 1.694 =$

Subtract. Remember to line up the decimal points. Show your work.

5. $17.6 - 9.3 =$

6. $32.3 - 12.72 =$

7. $23.96 - 19.931 =$

8. $63.36 - 0.007 =$

Multiply. Remember, the number of decimal places in the product equals the sum of the decimal places in the factors. Show your work.

9. $9.6 \times 5 =$

10. $1.35 \times 21.4 =$

11. $16.1 \times 3.66 =$

12. $8 \times 3.4 =$

Divide. Remember to first move the decimal points the number of places needed to make the divisor a whole number. Show your work.

13. $2.52 \div 3 =$

14. $8.43 \div 0.12 =$

15. $20.7 \div 0.6 =$

16. $6 \div 0.25 =$

Grade 8 Summer Math Decimal Word Problems

Name _____

Date _____

Show your work.

1. Hair grows about 0.01 inch daily. How much does hair grow in one week?

2. It takes 4.5 hours to drive from New York to Washington, D.C. How long does it take to make a round trip?

3. If you buy a book that costs \$7.47 and pay with a twenty dollar bill, how much change should you get?

4. If you ran 3.54 miles on Saturday and 3.6 miles on Sunday, how much more did you run on Sunday?

5. A can of dog food costs \$1.29. How much will 8 cans of dog food cost?

6. While training for a triathlon, you swim 1.6 miles, you run 4.35 miles, and you cycle 14.25 miles. How many miles did you swim, run, and cycle in all?

7. You and two friends have lunch at a restaurant. The bill is \$23.76. If you share the bill equally, how much do you each owe?

8. You and your family drove 329.44 miles on vacation this summer. If the car averaged 28.4 miles per gallon of gas, how many gallons of gas did the car use?

Grade 8 Summer Math

Percents

Name _____

Date _____

Show your work.

1. Write 20 out of 100 as a simplified fraction, as a decimal, and as a percent.

2. Write 25 out of 45 as a simplified fraction, as a decimal, and as a percent.

3. Write 12 out of 64 as a simplified fraction, as a decimal, and as a percent.

4. Write 16 out of 128 as a simplified fraction, as a decimal, and as a percent.

Grade 8 Summer Math Percents

Name _____

Date _____

Write an algebraic equation, then solve it! Show your work.

1. What is 20% of 10 ?

2. 12 is 8% of what number ?

3. What percent of 30 is 27 ?

4. 88% of what number is 22 ?

Percent Word Problems

Write an algebraic equation, then solve it! Show your work.

5. A sales tax of 5.75% is charged on a shirt priced at \$42. How much sales tax must be paid?

6. The regular price of a CD is \$15.00. What is the new price if there is a 20% discount?

7. A basketball team played 45 games. They won 60% of them. How many games did the team win?

8. A test had 50 questions. What percent of the total questions is 35 correct?

Grade 8 Summer Math Integers

Name _____

Date _____

Add.

1. $-6 + (-8) =$

2. $-9 + (-23) =$

3. $-28 + 82 =$

4. $-331 + 155 =$

Subtract.

5. $-5 - 7 =$

6. $63 - 72 =$

7. $-9 - (-16) =$

8. $21 - (-82) =$

Multiply.

9. $6 \times (-7) =$

10. $-30 \times (-30) =$

11. $-5 \times 10 =$

12. $16 \times (-2) =$

Divide.

13. $-32 \div 8 =$

14. $57 \div (-3) =$

15. $-23 \div (-1) =$

16. $-100 \div 4 =$

Grade 8 Summer Math Integer Word Problems

Name _____

Date _____

1. A submarine at the water's surface dropped down 100 feet. After thirty minutes at that depth, it dove an additional 500 feet. What was its depth after the second dive?

2. On a cruise ship, your cabin is 6 feet below sea level. The main deck is 35 feet above your cabin. How far above sea level is the main deck?

3. The temperature at midnight was -2 degrees. During the next 4 hours, a decrease of 4 degrees was recorded. What was the temperature at 4 A.M.?

4. A 200-foot column holds an oil rig platform above the ocean's surface. The column rests on the ocean floor 175 feet below sea level. How high is the platform above sea level?

5. If you have \$6 in your checking account and you write a check for \$10, what is your new checkbook balance?

6. The surface of an underground water supply was 10 meters below sea level. After one year, the depth of the water supply has decreased by 9 meters. What is the depth below sea level of the water's surface now?
