Math 8   Name: _____
Adding, Subtracting, Multiplying and Dividing   **Date:** _____
Fractions and Decimal study guide

Add, Subtract, Multiply or Divide. Show work for full credit.

1.   228.423 ÷ 6.5   2. 124.01 x 6.5   3. 98.0 - 23.861

4. 29.45 + 312.987   5. $\frac{2}{3}$ x $3\frac{3}{5}$ 6. $7\frac{3}{4} \div 2\frac{1}{12}$

7. $8\frac{1}{5}$ - $\frac{3}{4}$ 8. $6\frac{1}{2}$ + $2\frac{3}{4}$

List the perfect square for the following
9. 9^2 10. 15^2 11. 20^2

12. **What is the equivalent fraction to**

   a. $0.\overline{29}$ b. $3.\overline{5}$ c. $5.0\overline{9}$

13. **Solve** $.2\overline{3}$ x ¾

Read the word problem. Show work for full credit. Put your units

14. If you need $25 to buy a calf and you receive ¼ of a dollar each week for washing the floor, how many weeks will it take to earn enough money to buy the calf?

15. Victoria is writing a novel. She can write 6.5 pages of the book in a minute. If she writes for 9.43 minutes, how much would she have written?

16. Jack sells cotton candy at the state fair. On June 1st he sold 11 3/4 bags of cotton candy. On June 2nd he sold 2 ¼ times as much cotton candy as on Wednesday. How many bags of cotton candy did Jack sell on June 2nd?

17. Michael is trying to decide which car to drive on vacation   His BMW holds Twenty-two gallons of premium gas.   His Fold holds twenty-four gallons of regular gas Shell Gas charges $3.49 for premium gas and $ 3.09 for regular gas. How much money will a tank of gas cost for the BMW? How much money will a tank of gas cost for the Ford? What should he drive and why?

18. Jamee has 208.45 kb of space on her ipad. She wants to purchase some songs to go on her ipad. Each song is 3.47 kb. How many songs can she purchase before exceeding her storage space?

19. Jaylen has been measuring how much taller he has gotten over the past 3 years. In the first year he grew 4.23 cm. In the second year he grew 5.9 cm. In the third year he grew 4.52 cm. How much did he grow in all? If he began at 69 cm and has to be 83.65 cm to make the basketball team, will he be on the team?

20. Mrs. Conlan's Great Dane, Tiny, grew 29 ¾ inches over two years. In the first year, she grows 5 ½ inches. How much did she grow in the second year?

21. **REPEATING DECIMALS TO FRACTIONS (fill in the blank)**
   i. Write the numbers that are _____ in the numerator (_____).
   ii. Place _____'s in the denominator (bottom). ***The number of _____'s depends on the number of digits repeating*****
   iii. _____your fraction.