

Practice Sheet # 7

Name _____

Solve. Show your work.

1. Evaluate the expression when $x = 8$ and $m = 3$. $2(3x + 6) \div 10m$	6. Solve for x: $4x - 9 = 23$
2. $(8^2 - 2^5) \div (24 \div 6) + 3^2$	7. Evaluate the expression when $p = \frac{1}{2}$ and $n = \frac{3}{4}$. $6p + 8n - 3\frac{1}{5}$
3. Solve for x: $2x - 8 = 24$	8. $8.7 \cdot .48$
4. Solve for x: $-3x \leq 21$	9. Solve for x: $2x + 6 \geq 15$
5. $5\frac{2}{5} \div 4\frac{2}{3}$	10. $8 - 6\frac{5}{8}$

11. Rewrite $6\frac{11}{21}$ as a decimal rounded to the nearest hundredth.	14. $5(2^2 + 3) + 4 - 3 \cdot 2$
12. $-6 - (-5) - 9 + 2^3 - 8$	15. Solve for x: $-3x - 8 = -20$
13. $7\frac{1}{2} \div \frac{5}{8}$	16. Solve for x: $-2x + 6 < -2$

17. Tom harvested $27\frac{1}{3}$ bushels of apples. At the end of the day, he will sell these apples to 5 different merchants. If the apples are split amongst the merchants evenly, how many bushels will each person receive?

18. A rectangle has a length of 12 inches. The perimeter of the rectangle is 42 inches. What is the area of the rectangle?

19. Triangle A and Triangle B have the same base. The height of Triangle B is twice the height of Triangle A. How many times greater is the area of Triangle B?

19. The theoretical probability of winning a prize in a cereal box is $\frac{5}{8}$. There are 40 boxes of cereal on the supermarket shelf. How many contain a prize?

20. Each letter of the word ENGLISH is written on a separate index card. What is the theoretical probability of randomly choosing a card that contains a vowel?

21. At a carnival, you pick a duck out of a pond that designates a prize. You want to win a large prize and the theoretical probability of winning it is $\frac{9}{25}$. There are 50 ducks. How many ducks will win a large prize?

22. Find the value of n that makes the equation below true.

$$\frac{2}{3}n = 51$$

23. A bicycle wheel has a radius of 11.5 inches. What is the circumference of this wheel?

24. Jailin went to her local stereo store. Given her budget and the available selection, she can choose between 2 CD players, 5 amplifiers, and 3 pairs of speakers. How many different stereos can Jailin purchase?

25. Sunil wants to earn an 88% in her Chemistry class. She has one quiz left to take. On the first 5 quizzes, she received a 74%, 92%, 83%, 98%, 100%. What must she score on the 5th quiz to get the 88% she wants?