

Name:
Instructor:

Date:
Section:

Practice Set 2.3

Use the choices to fill in each blank.

multiplication	division	supplementary	elementary
addition	subtraction	complementary	calculator

- Two angles whose sum measures 90° are called _____.
- Two angles whose sum measures 180° are called _____.
- The words difference, decreased, and less translate into the operation of _____.
- The words increased, more than, and sum translate into the operation of _____.
- The words twice, times, and product translate into the operation of _____.
- The words quotient, per, and divided by translate into the operation of _____.

Express each phrase as an algebraic expression.

- 3 less than a number, x 7. _____
- the length, l , increased by 7 8. _____
- twice the difference of a number, n , and 1 9. _____
- 12 more than 3 times a number, p , 10. _____
- the number of cents in d dimes 11. _____
- the cost of t shirts at \$19.99 each 12. _____
- 20% commission on selling computers for c dollars 13. _____
- the amount of tax at a rate of 7% on d dollars 14. _____

Select one variable to represent one quantity and express the second quantity in terms of the first.

- Jeff and Tom have \$99 together. 15. _____
- Clarence and Carol complete a task together in 12 hours. 16. _____
- One angle of a triangle is 12° more than another. 17. _____
- The cost of postage has increased by 5%. 18. _____
- The sum of two numbers is 30. 19. _____
- Your age now and your age in 3 years 20. _____
- Nora can type 2% faster than Betty. 21. _____
- A 3-yard ribbon is cut into 2 pieces. 22. _____

Problem Solving

23. Angles A and B are complementary angles. Determine the measures of angles A and B if angle A is 14° less than 3 times the measure of angle B . 23. _____
24. Angles C and D are supplementary angles. Determine the measures of the angles C and D if angle C is 24° more than twice angle D . 24. _____
25. The sum of the measures of the angles of a triangle is 180° . Find the measures of the three angles of a triangle if the measure of the largest angle is 60° more than the smallest angle and the measure of the third angle is 3 times the smallest angle. 25. _____
26. WeChill Air Conditioning Repair Service charges \$75 for house calls plus \$40 per hour of labor. Another air conditioning repair service, 2Cool4U, charges \$60 for house calls plus \$50 per hour of labor. After how many hours of labor do the services cost the same? 26. _____
27. The cost for a large 16-inch cheese pizza at Myle's Pizza is \$11.90 plus \$1.75 for each additional topping. How many toppings can Bridget get on her large pizza if she has \$25 dollars to spend on the pizza? (Disregard tip and tax.) 27. _____

Challenge

28. The cost for a large 16-inch cheese pizza at Myle's Pizza is \$11.90 plus \$1.75 for each additional topping. How many toppings can Bridget get on her large pizza if she has \$25 to spend and wants to allow for the 7% sales tax and a 15% tip? 28. _____