

#1-6, Find each value; if necessary, round to the nearest hundredth.

1. $\frac{9}{6}$ as a percent 2. 25% of 60 is what number? 3. 38% of what number is 100?
4. Total for \$650 bike with 4% tax. 5. A 15% tip on \$46 dinner 6. Price for a \$70 jacket, 25% off

##7-9, Write an equation that represents the relationship being described, then solve the equation.

- 7 Three less than a number is eight. 8. Four more than twice a number is 18. 9. The quotient of a number and four is six
10. The city of Bozeman expects its population to grow 2.5% next year. If it is 60,000 now, then next year how many residents?
11. _____ is 35% of _____.

#12-13, Write each as an algebraic expression

12. A cab company allows its drivers to keep $\frac{3}{10}$ of all the money they collect. The rest goes to the company. If a driver collects f dollars, how much does the company keep? (*in terms of f*)
13. Melia, Kaitlyn and Chelsea all collect stamps. Chelsea and Melia each have 4 times as many stamps as Kaitlyn. If Kaitlyn has K stamps, how many do they have altogether? (*in terms of K*)

#14-20, Write an equation modeling each situation (2 pt), then solve it (1 pt). Make sure you put units on your answer. (.5 pt)

14. The number of turtles and bunnies entered in a pet show is three and half times the quantity of cats and dogs. There were 36 turtles, 10 dogs and 13 bunnies. How many cats?
15. The number of trees planted by Lovely Luis's Nursery in April was three more than twice the number planted in March. If 71 trees were planted in April, how many were planted in March?
16. Ben bought his girlfriend a new computer for \$347. This price is \$35 more than three times the wholesale cost. What is the wholesale cost?
17. The temperature in Chesapeake, VA is 52° and rising 2 degrees per hour. The temperature in Vienna, Austria is 78° and dropping 3 degrees per hour. If the temperature continue to change at the same rate, when will the two temperatures be the same?

18. Kyle and Ryan's ages are consecutive numbers (Ryan is older). If their ages sum to 93, how old is each ?
19. A gardener charges \$18 per hour and a certain set amount for house calls. If the gardener came to your house, worked $2\frac{1}{2}$ hours and charged \$103, what was the house call fee?
20. Amanda's Awesome Car Rentals charges \$44 for each day plus 6¢ per mile to rent a mid-sized vehicle. Katie's Klunkers charges \$35 per day plus 9¢ per mile for the same car. If you need a one-day rental, for what number of miles will both companies charge the same price?