

17. **Finance** A loan of \$6600 is to be paid in 48 equal monthly installments. Find the monthly payment. Use the formula  $L = P \cdot N$ , where  $L$  is the loan amount,  $P$  is the monthly payment, and  $N$  is the number of months.
18. **Manufacturing** A clock manufacturer's fixed costs per month are \$5000. The unit cost for each clock is \$15. Find the number of clocks made during a month in which the total cost was \$65,000. Use the formula  $T = U \cdot N + F$ , where  $T$  is the total cost,  $U$  is the cost per unit,  $N$  is the number of units made, and  $F$  is the fixed costs.
19. **Physics** Find the time required for a falling object to increase in velocity from 24 ft/s to 392 ft/s. Use the formula  $V = V_0 + 32t$ , where  $V$  is the final velocity of a falling object,  $V_0$  is the starting velocity of a falling object, and  $t$  is the time for the object to fall.
20. Translate "the sum of  $x$  and one-third of  $x$ " into a mathematical expression.
21. Translate "five times the sum of a number and three" into a mathematical expression.
22. Translate "three less than two times a number is seven" into an equation and solve.
23. The total of five and three times a number is the number minus two. Find the number.
24. **Compensation** Eduardo Santos earned \$3600 last month. This salary is the sum of the base monthly salary of \$1200 and a 6% commission on total sales. Find his total sales for the month.
25. **Consumerism** Your mechanic charges you \$278 for performing a 30,000-mile checkup on your car. This charge includes \$152 for parts and \$42 per hour for labor. Find the number of hours the mechanic worked on your car.

