

LESSON
1.3

Practice C

For use with the lesson "Write Expressions"
Translate the verbal phrase into an expression.

- The quotient of a number c and $\frac{1}{2}$
- 24 decreased by 3 times a number b
- 5 more than 6 times a number x
- 8 less than a number y , divided by 3
- 8 times the cube of a number m
- The sum of the square of a number x and 4
- 10 times the sum of a number b and 9
- 18 more than $\frac{3}{4}$ of a number t

Write an expression for the situation.

- Amount of money you earn per hour if you make d dollars in 15 hours
- The total cost for 4 people to ride the bus if the fare of \$.75 is increased by d dollars
- The total width of a picture with its frame if the picture is 12 inches wide and the frame is x inches wide

Find the unit rate.

12. $\frac{220 \text{ students}}{8 \text{ classes}}$

13. $\frac{\$67.50}{6 \text{ CDs}}$

14. $\frac{150 \text{ plastic cups}}{3 \text{ packages}}$

- Painting Class** You are setting up a children's painting class. Poster board paints cost \$3.80 for each child, and a package of 100 sheets of poster board costs \$66.50. Assuming that you only need one package of poster board, write an algebraic expression for the total cost of supplies. Find the total cost if 18 students sign up for the class.
- Boat Rental** At a lake, there are 2 boat rental shops. Shop A charges \$210 for a 4-hour rental, and shop B charges \$228 for a 6-hour rental. Which shop charges more per hour? How much more expensive is this shop?
- Catering** A catering business charges \$50 for setting up a meal and \$150 for enough food for 12 people. You will be using the caterer for an upcoming celebration. There will be 32 people at the party. Find the total cost to use the caterer for the party.
- Cubby Holes** You work part-time at a daycare center and are building the storage unit shown in the figure so that the children at the center can store their things. Write an expression for the total number of feet of wood needed to build the unit. *Hint:* Write separate expressions for the number of feet of vertical pieces needed and the number of feet of horizontal pieces needed. Then find the total number of feet of wood needed if the unit is 3 feet tall and 8.5 feet wide. The wood is sold in 5-foot lengths. How many pieces of wood do you need to purchase?

