

**Problem Solving****1-1: Variables and Expressions****Write the correct answer.**

1. For her book club, Sharon reads for 45 minutes each day. Write an expression for the number of hours she reads in  $d$  days.  
\_\_\_\_\_
2. The minimum wage in 2003 was \$5.15. This was  $w$  more than the minimum wage in 1996. Write an expression for the minimum wage in 1996.  
\_\_\_\_\_
3. According to the 2000 census, the number of people per square mile in Florida was about 216 more than the number of people per square mile in Texas. Write an expression for the number of people per square mile in Florida if there were  $t$  people per square mile in Texas.  
\_\_\_\_\_
4. The cost of a party is \$550. The price per person depends on how many people attend the party. Write an expression for the price per person if  $p$  people attend the party. Then find the price per person if 25, 50, and 55 people attend the party.  
\_\_\_\_\_

**Use the table below to answer questions 5–6, which shows the years five states entered the Union. Select the best answer.**

5. North Carolina entered the Union  $x$  years after Pennsylvania. Which expression shows the year North Carolina entered the Union?
6. The expression  $f - 26$  represents the year Alabama entered the Union, where  $f$  is the year Florida entered. In which year did Alabama enter the Union?
7. The number of states that entered the Union in 1889 was half the number of states  $s$  that entered in 1788. Which expression shows the number of states that entered the Union in 1889?

State	Year Entered into Union
Florida	1845
Indiana	1816
Pennsylvania	1787
Texas	1845
West Virginia	1863

**Give two ways to write each algebraic expression in words.**

8.  $k + 2.5$
9.  $-5n$
10.  $b + 25$
11.  $100 - x$

**Evaluate each expression for  $x = 28$ ,  $y = 14$ , and  $z = 4$ .**

12.  $x - y$
13.  $yz$
14.  $\frac{z}{x}$

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Block: \_\_\_\_\_

1)

A boat travels 160 miles in 5 hours.  
What is its speed in miles per minute?

2)

Eric read 150 pages in one hour.  
What is Eric's reading rate in pages per minute?

3)

A giraffe can run 32 miles per hour. What is this  
speed in feet per second? Round your answer  
to the nearest tenth.

4)

A peregrine falcon flew  $16\frac{2}{3}$  miles in 5 minutes.

What is this speed in feet per second? Round your  
answer to the nearest tenth.

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