Name _____ Date _____ Class_____

Evaluating Expressions

Practice and Problem Solving: D

Evaluate each expression for the given value of the variable.
Show each step you used. The first one is done for you.

1. $3n + 4^2$ when $n = 2$

   $3 \times \mathbf{2} + 4^2$ $\rightarrow$ Substitute 2 for n.

   $3 \times 2 + \mathbf{16}$ $\rightarrow$ Evaluate exponents.

   $\mathbf{6} + 16$ $\rightarrow$ Multiply.

   $\mathbf{22}$ $\rightarrow$ Add.

2. $2 \times (a + 3)$ when $a = 5$

   $2 \times (5 + 3)$ $\rightarrow$ Substitute values.

   $2 \times$ ____ $\rightarrow$ Clear the parentheses.

   ____ $\rightarrow$ Multiply.

3. $r + r \div 2 \times 4$ when $r = 8$

   $8 + 8 \div 2 \times 4$ $\rightarrow$ Substitute values.

   $8 +$ ___ $\times 4$ $\rightarrow$ Multiply or divide from left to right, so divide first.

   $8 +$ ___ $\rightarrow$ Multiply.

   ___ $\rightarrow$ Add.

Use the given values to complete each table. The first one is done for you.

4.
w	$6(3 + w)$
2	30
3	36
4	42

5.
c	$2c + 7$
4	
6	
8	

6.
w	$w^2 - 3$
2	
3	
4	

Solve. Show your work.

7. The height of horses is measured in *hands*. To find the
   height of a horse in inches, use the expression 4h,
   where h is the number of hands. Rosa has a horse that
   is 15 hands tall. How tall is Rosa's horse in inches?

   Rosa's horse is ____ inches tall.