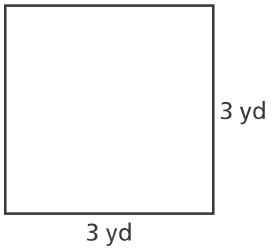
Name_____ Date_____

Chapter 1 Fair Game Review

Find the area.

1.



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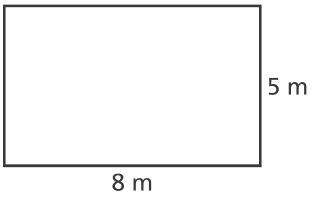

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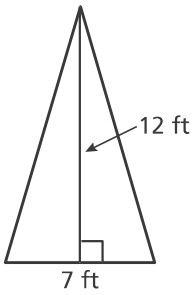

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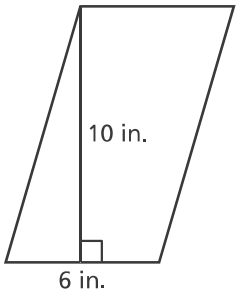

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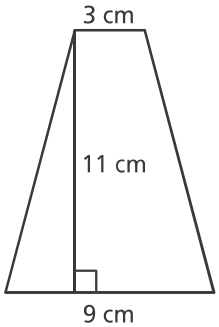
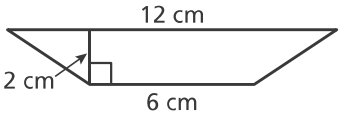


6.



7. An office building has a window shaped like a parallelogram. The window has a base that is 12 inches and a height that is 10 inches. What is the area of the window?

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Chapter 1

Fair Game Review (continued)

Simplify the expression.

8. $9 - 6 \div 3$

9. $4 \bullet 8 - 2 \div 2$

10. $8 + (10 - 4)$

11. $6^2 - 7(2)$

12. $3 \bullet 7 \bullet 2$

13. $(5^2 + 1) \div 13$

14. $40 - 5 \bullet 7 + 11$

15. $10 - (2 + 1)^2$

16. You and three friends go to a restaurant for dinner. You buy three appetizers that cost \$6 each. You also buy two desserts that cost \$3 each. You split the total bill evenly. How much do you pay?

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1.1 Evaluating Algebraic Expressions

For use with Activity 1.1

Essential Question How can you write and evaluate an expression that represents a real-life problem?

1 EXAMPLE: Reading and Re-Reading

You are babysitting for 3 hours. You will receive $12.

What is your hourly wage?

- Underline the numbers and units you need to solve the problem.
- Read the problem carefully a second time. Underline the key word for the question in another color.
- Write each important number and word, with its units, on a small piece of paper. Make five other pieces of paper with +, −, ×, ÷, and =.

3 h × + = hourly wage ($ per hour)

$12 − ÷

- Arrange the pieces of paper to form an equation. Use it to answer the key word question "What is your hourly wage?" Make sure the units for the key word are the same as the units in the expression.

- Evaluate the expression on the right side of the equation.

Your hourly wage is _____.

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1.1 Evaluating Algebraic Expressions (continued)

2 ACTIVITY: Reading and Re-Reading

Work with a partner. Use the strategy shown in Example 1 to write an expression for each problem. After you have written the expression, evaluate it using mental math or some other method.

a. You are washing cars for 2 hours. You will receive $6. How much will you earn per hour?

Expression: Expression: _____

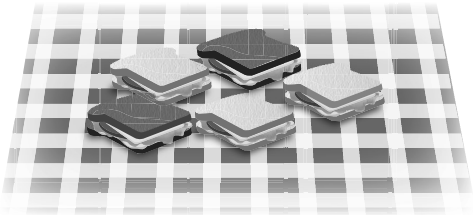
Amount you earn per hour: _____

b. You have $60. You buy a pair of jeans and a shirt. The pair of jeans costs $27. You come home with $15. How much did you spend on the shirt?

Expression: _____

Amount you spend on shirt: _____

c. For lunch, you buy 5 sandwiches that cost $3 each. How much do you spend?



Expression: _____

Amount you spend on sandwiches: _____

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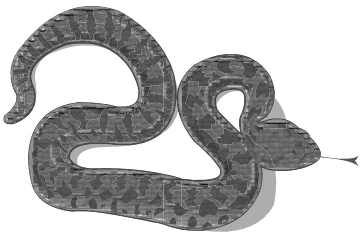
1.1 Evaluating Algebraic Expressions (continued)

d. You are running a 4500-foot race. How much farther do you have left to go after running 2000 feet?

Expression: _____

Amount left to go: _____

e. A young rattlesnake grows at a rate of about 20 centimeters per year. How much does a young rattlesnake grow in 2 years?



Expression: _____

Amount rattlesnake grows in 2 years: _____

What Is Your Answer?

3. **IN YOUR OWN WORDS** How can you write and evaluate an expression that represents a real-life problem? Give one example with addition, one with subtraction, one with multiplication, and one with division.

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1.1 Practice

For use after Lesson 1.1

Evaluate the expression when $a = 4$, $b = 5$, and $c = 10$.

1. $a + 7$

2. $b - 3$

3. $9c$

4. $25 \div b$

5. $a \bullet c$

6. $b - a$

7. $a + b + c$

8. $\frac{c}{b}$

9. $4a - 7$

10. $b^2 + 2.5$

11. $\frac{c}{5} + 6a$

12. $bc - 13$

13. After m minutes, an adult blinks about $10m + 3$ times. About how many times does an adult blink in three minutes? in two hours?

14. You need $2b$ cups of flour for making b loaves of bread. You have 8 cups of flour. Do you have enough for 5 loaves of bread? Explain.

15. The expression $9a + 6s$ is the cost for a adults and s students to see a musical performance.

a. Find the total cost for three adults and five students.

b. The number of adults and students in a group both double. Does the cost double? Explain your answer using an example.

c. The number of students doubles, but the number of adults is cut in half. Is the cost the same? Explain your answer using an example.

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