

## Another Look

For use with Lesson 3-11.

### Algebraic Expressions

To solve a problem that has two or more unknowns, you must first decide which unknown the variable will represent. Then you can express the other unknown(s) in terms of that variable.

**Example:** Write an expression for the difference of an integer and twice the next odd integer.

Use  $x$  to represent an integer. The next odd integer would then be  $(x + 2)$ .  
To write the expression, subtract twice the next odd integer from the original integer.

$$x - 2(x + 2)$$

Write an algebraic expression for each of the following.

- The sum of three consecutive even integers.  
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- The sum of an integer and  $\frac{1}{5}$  of the next integer.  
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- The length of a rectangle is 2 more than 3 times the width. Write an expression for the difference of the length and the width.  
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- A CD costs \$4 more than a cassette tape. Write an expression for the cost of 2 CDs and 4 cassette tapes.  
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- A piece of wood is cut into 3 pieces. The first piece is half as long as the second piece. The third piece is 1 foot longer than the second piece. Write an expression for the sum of the lengths of the pieces.  
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- One angle of a triangle is twice as large as another angle. The third angle is three times as large as the first angle. Write an expression for the sum of the angles of the triangle.  
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