



# More Practice

## Book 2 Worksheet

### Module 1.1: Algebra Concepts: The Basics

**Example** Evaluate  $7c + 11$  when  $c = 6$ .

**Here's How**

$$\begin{array}{l}
 7c + 11 \\
 \swarrow \\
 7 \cdot 6 + 11 \\
 42 + 11 = 53
 \end{array}$$

**Step 1** Replace the variable with the given value.

**Step 2** Perform any operations following the order of operations.

So, when  $c = 6$ , the value of  $7c + 11$  is **53**.

**Complete.**

<p>1. <math>\blacktriangle - 3</math> when <math>\blacktriangle = 12</math></p> <p><u>12</u> <math>- 3 =</math> <u>9</u></p> <p>When <math>\blacktriangle = 12</math>, the value of <math>\blacktriangle - 3</math> is <u>9</u>.</p>	<p>2. <math>20 + \star</math> when <math>\star = 7</math></p> <p><math>20 +</math> <u>7</u> <math>=</math> <u>27</u></p> <p>When <math>\star = 7</math>, the value of <math>20 + \star</math> is <u>27</u>.</p>
<p>3. <math>5x - 17</math> when <math>x = 20</math></p> <p><math>5 \cdot</math> <u>20</u> <math>- 17</math></p> <p><u>100</u> <math>- 17 =</math> <u>83</u></p> <p>When <math>x = 20</math>, the value of <math>5x - 17</math> is <u>83</u>.</p>	<p>4. <math>9n + 6b</math> when <math>n = 4</math> and <math>b = 0.5</math></p> <p><math>9 \cdot</math> <u>4</u> <math>+ 6 \cdot</math> <u>0.5</u></p> <p><u>36</u> <math>+ 3 =</math> <u>39</u></p> <p>When <math>n = 4</math> and <math>b = 0.5</math>, the value <math>9n + 6b</math> is <u>39</u>.</p>

**Evaluate each expression.**

<p>5. <math>\heartsuit - 15</math> when <math>\heartsuit = 24</math></p> <p><u>9</u></p>	<p>6. <math>65 + \spadesuit</math> when <math>\spadesuit = 49</math></p> <p><u>114</u></p>
<p>7. <math>33 + 2s</math> when <math>s = 8</math></p> <p><u>49</u></p>	<p>8. <math>3.75x - 42</math> when <math>x = 100</math></p> <p><u>333</u></p>
<p>9. <math>5y + 3z</math> when <math>y = 7</math> and <math>z = 9</math></p> <p><u>62</u></p>	<p>10. <math>a - 6b</math> when <math>a = 11.5</math> and <math>b = 0.3</math></p> <p><u>9.7</u></p>