



# 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>_____ <math>- 3 =</math> _____</p> <p>When <math>\blacktriangle = 12</math>, the value of <math>\blacktriangle - 3</math> is _____.</p>      | <p>2. <math>20 + \blacklozenge</math> when <math>\blacklozenge = 7</math></p> <p><math>20 +</math> _____ <math>=</math> _____</p> <p>When <math>\blacklozenge = 7</math>, the value of <math>20 + \blacklozenge</math> is _____.</p>  |
| <p>3. <math>5x - 17</math> when <math>x = 20</math></p> <p><math>5 \cdot</math> _____ <math>- 17</math></p> <p>_____ <math>- 17 =</math> _____</p> <p>When <math>x = 20</math>, the value of <math>5x - 17</math> is _____.</p> | <p>4. <math>9n + 6b</math> when <math>n = 4</math> and <math>b = 0.5</math></p> <p><math>9 \cdot</math> _____ <math>+ 6 \cdot</math> _____</p> <p>_____ <math>+</math> _____ <math>=</math> _____</p> <p>When <math>n = 4</math> and <math>b = 0.5</math>, the value <math>9n + 6b</math> is _____.</p> |

**Evaluate each expression.**

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