

Key.

# VersaTiles: MULTI-STEP EQUATIONS

Solve each problem, making sure to show your work for each problem, step-by-step.

<p>1. <math>9b + 5 - 9 = -49</math></p> <p>(B) <math>9b - 4 = -49</math>  <math>+4 +4</math>  <hr/> <math>9b = -45</math>  <math>\frac{9b}{9} = \frac{-45}{9}</math>  <math>b = -5</math></p>	<p>2. <math>8z + 9 + 12z = 71</math></p> <p>(F) <math>20z - 9 = 71</math>  <math>+9 +9</math>  <hr/> <math>20z = 80</math>  <math>\frac{20z}{20} = \frac{80}{20}</math>  <math>z = 4</math></p>	<p>3. <math>4.3c + 12 + 15.1c = 33.6</math></p> <p>(D) <math>10.8c + 12 = 33.6</math>  <math>-12 -12</math>  <hr/> <math>10.8c = 21.6</math>  <math>\frac{10.8c}{10.8} = \frac{21.6}{10.8}</math>  <math>c = 2</math></p>
<p>4. <math>\frac{2}{5}(10p + 15) = 14</math></p> <p>(A) <math>4p + 6 = 14</math>  <math>+6 +6</math>  <hr/> <math>4p = 8</math>  <math>\frac{4p}{4} = \frac{8}{4}</math>  <math>p = 2</math></p>	<p>5. <math>2(5x + 3) = 16</math></p> <p>(J) <math>10x + 6 = 16</math>  <math>-6 -6</math>  <hr/> <math>10x = 10</math>  <math>\frac{10x}{10} = \frac{10}{10}</math>  <math>x = 1</math></p>	<p>6. <math>2(5c - 5.1) = -20.2</math></p> <p>(E) <math>10c - 10.2 = -20.2</math>  <math>+10.2 +10.2</math>  <hr/> <math>10c = -10</math>  <math>\frac{10c}{10} = \frac{-10}{10}</math>  <math>c = -1</math></p>
<p>7. <math>4(2q - 7) = -4</math></p> <p>(G) <math>8q - 28 = -4</math>  <math>+28 +28</math>  <hr/> <math>8q = 24</math>  <math>\frac{8q}{8} = \frac{24}{8}</math>  <math>q = 3</math></p>	<p>8. <math>\frac{1}{2}(6n - 18) + 3 = 24</math></p> <p>(L) <math>3n - 9 + 3 = 24</math>  <math>3n - 6 = 24</math>  <math>+6 +6</math>  <hr/> <math>3n = 30</math>  <math>\frac{3n}{3} = \frac{30}{3}</math>  <math>n = 10</math></p>	<p>9. <math>3.4(2x + 5) = -23.8</math></p> <p>(I) <math>6.8x + 17 = -23.8</math>  <math>-17 -17</math>  <hr/> <math>6.8x = -40.8</math>  <math>\frac{6.8x}{6.8} = \frac{-40.8}{6.8}</math>  <math>x = -6</math></p>
<p>10. <math>-2(4x + 2) = 20</math></p> <p>(H) <math>-8x + 4 = 20</math>  <math>+4 +4</math>  <hr/> <math>-8x = 16</math>  <math>\frac{-8x}{-8} = \frac{16}{-8}</math>  <math>x = -2</math></p>	<p>11. <math>-\frac{1}{4}(8w + 3) = 3\frac{1}{4}</math></p> <p>(C) <math>-2w + \frac{-3}{4} = 3\frac{1}{4}</math>  <math>+ \frac{3}{4} + \frac{3}{4}</math>  <hr/> <math>-2w = 4</math>  <math>\frac{-2w}{-2} = \frac{4}{-2}</math>  <math>w = -2</math></p>	<p>12. <math>34.1 = -3.1(4y + 5)</math></p> <p>(K) <math>34.1 = -12.4y + 15.5</math>  <math>+15.5 +15.5</math>  <hr/> <math>49.6 = -12.4y</math>  <math>-12.4 -12.4</math>  <math>-4 = y</math></p>

## ANSWER SQUARES

A. ✓ <b>5</b>	B. ✓ <b>-5</b>	C. ✓ <b>-2</b>	D. ✓ <b>2</b>	E. ✓ <b>-1</b>	F. ✓ <b>4</b>
G. ✓ <b>3</b>	H. ✓ <b>-3</b>	I. ✓ <b>-6</b>	J. ✓ <b>1</b>	K. ✓ <b>-4</b>	L. ✓ <b>10</b>