







Item Number	Answer Key	Evidence Statement Key																									
1.	C	7.NS.1b-2																									
2.	C	7.NS.1c-1																									
3.	4	7.NS.3																									
4.	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 30%;">Expression</th> <th style="width: 15%;">Equivalent to <math>\frac{1}{2}x - 1</math></th> <th style="width: 15%;">Equivalent to <math>x - \frac{1}{2}</math></th> <th style="width: 40%;">Not Equivalent to <math>\frac{1}{2}x - 1</math> or <math>x - \frac{1}{2}</math></th> </tr> </thead> <tbody> <tr> <td><math>\frac{2}{3} \left( \frac{3}{4}x - \frac{3}{2} \right)</math></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td><math>(2x + 1) - \left( x + \frac{3}{2} \right)</math></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> </tbody> </table>	Expression	Equivalent to $\frac{1}{2}x - 1$	Equivalent to $x - \frac{1}{2}$	Not Equivalent to $\frac{1}{2}x - 1$ or $x - \frac{1}{2}$	$\frac{2}{3} \left( \frac{3}{4}x - \frac{3}{2} \right)$	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	$(2x + 1) - \left( x + \frac{3}{2} \right)$	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7.EE.1													
Expression	Equivalent to $\frac{1}{2}x - 1$	Equivalent to $x - \frac{1}{2}$	Not Equivalent to $\frac{1}{2}x - 1$ or $x - \frac{1}{2}$																								
$\frac{2}{3} \left( \frac{3}{4}x - \frac{3}{2} \right)$	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																								
$(2x + 1) - \left( x + \frac{3}{2} \right)$	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>																								
5.	B, E	7.EE.2																									
6.	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;">Farmer</th> <th style="width: 15%;">Rate</th> <th style="width: 15%;">Unit Rate Less than Ed's Unit Rate</th> <th style="width: 15%;">Unit Rate Equal to Ed's Unit Rate</th> <th style="width: 45%;">Unit Rate Greater than Ed's Unit Rate</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>\$0.50 for <math>\frac{1}{2}</math> pound</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> </tr> <tr> <td>B</td> <td>\$0.75 for 1 pound</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>C</td> <td>\$1.75 for <math>2\frac{1}{2}</math> pounds</td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>D</td> <td>\$6.00 for 8 pounds</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> </tbody> </table>	Farmer	Rate	Unit Rate Less than Ed's Unit Rate	Unit Rate Equal to Ed's Unit Rate	Unit Rate Greater than Ed's Unit Rate	A	\$0.50 for $\frac{1}{2}$ pound	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	B	\$0.75 for 1 pound	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	C	\$1.75 for $2\frac{1}{2}$ pounds	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	D	\$6.00 for 8 pounds	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7.RP.2b
Farmer	Rate	Unit Rate Less than Ed's Unit Rate	Unit Rate Equal to Ed's Unit Rate	Unit Rate Greater than Ed's Unit Rate																							
A	\$0.50 for $\frac{1}{2}$ pound	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>																							
B	\$0.75 for 1 pound	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>																							
C	\$1.75 for $2\frac{1}{2}$ pounds	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																							
D	\$6.00 for 8 pounds	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>																							
7.	A	7.RP.2c																									
8.	D	7.RP.2d																									

9.	<table border="1"> <thead> <tr> <th>Expression</th> <th></th> <th></th> <th>Neither number line model can be used to represent the expression.</th> </tr> </thead> <tbody> <tr> <td><math>-2 + 4</math></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td><math>-2 - 4</math></td> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td><math>-2 - (-4)</math></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td><math>-4 + 2</math></td> <td><input checked="" type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td><math>-4 - (-2)</math></td> <td><input checked="" type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> </tbody> </table>	Expression			Neither number line model can be used to represent the expression.	$-2 + 4$	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	$-2 - 4$	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	$-2 - (-4)$	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	$-4 + 2$	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	$-4 - (-2)$	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7.NS.1d
Expression			Neither number line model can be used to represent the expression.																							
$-2 + 4$	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>																							
$-2 - 4$	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>																							
$-2 - (-4)$	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>																							
$-4 + 2$	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																							
$-4 - (-2)$	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																							
10.	B	7.NS.2a-2																								
11.	<table border="1"> <thead> <tr> <th>Given Expression</th> <th>Is Equivalent to <math>6 \times 4 \frac{1}{2}</math></th> <th>Is Not Equivalent to <math>6 \times 4 \frac{1}{2}</math></th> </tr> </thead> <tbody> <tr> <td><math>6 \times 4 + \frac{1}{2}</math></td> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td><math>6 \times 5 - \frac{1}{2}</math></td> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td><math>6 \times 4 + 6 \times \frac{1}{2}</math></td> <td><input checked="" type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td><math>6 \times 5 - 6 \times \frac{1}{2}</math></td> <td><input checked="" type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> </tbody> </table>	Given Expression	Is Equivalent to $6 \times 4 \frac{1}{2}$	Is Not Equivalent to $6 \times 4 \frac{1}{2}$	$6 \times 4 + \frac{1}{2}$	<input type="checkbox"/>	<input checked="" type="checkbox"/>	$6 \times 5 - \frac{1}{2}$	<input type="checkbox"/>	<input checked="" type="checkbox"/>	$6 \times 4 + 6 \times \frac{1}{2}$	<input checked="" type="checkbox"/>	<input type="checkbox"/>	$6 \times 5 - 6 \times \frac{1}{2}$	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7.NS.2c									
Given Expression	Is Equivalent to $6 \times 4 \frac{1}{2}$	Is Not Equivalent to $6 \times 4 \frac{1}{2}$																								
$6 \times 4 + \frac{1}{2}$	<input type="checkbox"/>	<input checked="" type="checkbox"/>																								
$6 \times 5 - \frac{1}{2}$	<input type="checkbox"/>	<input checked="" type="checkbox"/>																								
$6 \times 4 + 6 \times \frac{1}{2}$	<input checked="" type="checkbox"/>	<input type="checkbox"/>																								
$6 \times 5 - 6 \times \frac{1}{2}$	<input checked="" type="checkbox"/>	<input type="checkbox"/>																								
12.	From 10 a.m. to 2 p.m., the temperature at Sam's house <input type="text" value="increased"/> by <input type="text" value="8"/> ° Fahrenheit.	7.NS.3																								
13.	D	7.EE.1																								
14.	10	7.EE.4a-1																								
15.	B	7.EE.4a-1																								
16.	A	7.EE.4b																								
17.	A, E	7.G.3																								
18.	5	7.SP.3																								

19.	A	7.RP.1
20.	Part A: B Part B: 72	7.RP.3-1
21.	Part A: B Part B: 20000	7.RP.3-2
22.	Part A: 68.40 Part B: 456	7.EE.3
23.	Part A: 252 Part B: 1062.50	7.EE.3
24.	Volume = <input type="text" value="18"/> cubic feet Surface Area = <input type="text" value="44"/> square feet	7.G.6
25.	<div style="border: 1px solid black; padding: 10px;"> <p>The equation to find <math>x</math>, the measure of angle <math>TQV</math>, is <math>2x = 100</math>.</p> <p>The measure of angle <math>TQV</math> is 50 degrees.</p> </div> <p>NOTE: or equivalent equation</p>	7.G.5
26.	Part A: A, B, E Part B: A, D, E	7.G.2
27.	B	7.SP.4
28.	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; padding: 5px; text-align: center;">Arrow lands on a section labeled with the number 1.</div> <div style="border: 1px solid black; padding: 5px; text-align: center;">Arrow lands on a section labeled with an odd number.</div> <div style="border: 1px solid black; padding: 5px; text-align: center;">Arrow lands on a section labeled with a number less than 4.</div> </div> <p>Least Likely <span style="float: right;">Most Likely</span></p>	7.SP.5
29.	$\frac{1}{6}$ or equivalent	7.SP.7a
30.	<input type="text" value="2"/> <hr style="width: 50%; margin: 5px auto;"/> <input type="text" value="3"/>	7.RP.1

31.	Part A: 25 Part B: 750 Part C: B Part D: C	7.RP.3-1
32.	<div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="border: 1px solid #ccc; padding: 5px; width: 20%; text-align: center;"> <p>Soup B: 2 cans for \$5.00</p> <div style="border: 1px solid #007bff; padding: 2px; margin: 5px; color: #007bff;">Does not have the same price per can as Soup A</div> </div> <div style="border: 1px solid #ccc; padding: 5px; width: 20%; text-align: center;"> <p>Soup C: 3 cans for \$4.50</p> <div style="border: 1px solid #007bff; padding: 2px; margin: 5px; color: #007bff;">Has the same price per can as Soup A</div> </div> <div style="border: 1px solid #ccc; padding: 5px; width: 20%; text-align: center;"> <p>Soup D: 5 cans for \$5.50</p> <div style="border: 1px solid #007bff; padding: 2px; margin: 5px; color: #007bff;">Does not have the same price per can as Soup A</div> </div> <div style="border: 1px solid #ccc; padding: 5px; width: 20%; text-align: center;"> <p>Soup E: 6 cans for \$9.00</p> <div style="border: 1px solid #007bff; padding: 2px; margin: 5px; color: #007bff;">Has the same price per can as Soup A</div> </div> </div>	7.RP.2a
33.	Part A: 10 Part B: <p>Based on the results of this simulation, when 3 people are randomly selected, exactly 2 right-handed people are selected approximately <input style="width: 50px; border: 1px solid #ccc;" type="text" value="20"/> percent of the time.</p>	7.SP.8c