

Chapter 6 Performance Task (continued)

Rubric

Tornado Alley				Points																								
1.	<table border="1"> <tr> <td>Texas</td> <td>43</td> <td>155</td> <td>27.7%</td> </tr> <tr> <td>Oklahoma</td> <td>28</td> <td>62</td> <td>45.2%</td> </tr> <tr> <td>Kansas</td> <td>38</td> <td>96</td> <td>39.6%</td> </tr> <tr> <td>Nebraska</td> <td>17</td> <td>57</td> <td>29.8%</td> </tr> <tr> <td>Iowa</td> <td>12</td> <td>51</td> <td>23.5%</td> </tr> <tr> <td>Missouri</td> <td>12</td> <td>45</td> <td>26.7%</td> </tr> </table>	Texas	43	155	27.7%	Oklahoma	28	62	45.2%	Kansas	38	96	39.6%	Nebraska	17	57	29.8%	Iowa	12	51	23.5%	Missouri	12	45	26.7%			6 Total possible points 1 Point for each correct calculation
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2.	$\frac{43}{w} = \frac{154}{100}; w \approx 28$ tornadoes			2 Total possible points 1 Point for each correct answer																								
3.	$\frac{a}{62} = \frac{3}{100}; a \approx 1$ tornado			2 Total possible points 1 Point for each correct answer																								
4.	$p \approx 15.8\%; \frac{96 + 57 + 45}{1253} = \frac{p}{100}$			2 Total possible points 1 Point for each correct answer																								
5.	<p><i>Sample answer:</i> In both methods, you are adding the same parts of a whole. The whole 1253 is represented by 1253 and by 100%.</p> <p>Because $\frac{a}{w} = \frac{p}{100}$, the relationships between part and whole are equal.</p>			4 Thoughtful response that references calculations 2 Well-written response without reference to calculations 1 Poorly written response without reference to calculations																								
Mathematical Practices: Understand complex problems and show determination when solving them. Students will write and solve proportions.				4 The student knows how to represent the part, whole, and percent in a percent problem, as well as solve for the unknown. Award partial credit as needed.																								
Total Points				20 points																								