## Examine the differences between qualitative and quantitative data.

Qualitative Data	Quantitative Data
<ul> <li>Deals with descriptions.</li> <li>Data can be observed but not measured.</li> <li>Colors, textures, smells, tastes, appearance, beauty, etc.</li> <li>Qualitative → Quality</li> </ul>	<ul> <li>Deals with numbers.</li> <li>Data which can be measured.</li> <li>Length, height, area, volume, weight, speed, time, temperature, humidity, sound levels, cost, members, ages, etc.</li> <li>Quantitative → Quantity</li> </ul>
Example 1: Oil Painting	Example 1: Oil Painting
<ul> <li>blue/green color, gold frame</li> <li>smells old and musty</li> <li>texture shows brush strokes of oil paint</li> <li>peaceful scene of the country</li> <li>masterful brush strokes</li> </ul>	<ul> <li>picture is 10" by 14"</li> <li>with frame 14" by 18"</li> <li>weighs 8.5 pounds</li> <li>surface area of painting is 140 sq. in.</li> <li>cost \$300</li> </ul>
Example 2: Latte	Example 2: Latte
<ul> <li>robust aroma</li> <li>frothy appearance</li> <li>strong taste</li> <li>burgundy cup</li> </ul>	<ul> <li>12 ounces of latte</li> <li>serving temperature 150° F.</li> <li>serving cup 7 inches in height</li> <li>cost \$4.95</li> </ul>
Example 3: Freshman Class	Example 3: Freshman Class
<ul> <li>friendly demeanors</li> <li>civic minded</li> <li>environmentalists</li> <li>positive school spirit</li> </ul>	<ul> <li>672 students</li> <li>394 girls, 278 boys</li> <li>68% on honor roll</li> <li>150 students accelerated in mathematics</li> </ul>

Source: http://regentsprep.org/regents/math/algebra/AD1/qualquant.htm