

NAME \_\_\_\_\_ DATE \_\_\_\_\_ PER. \_\_\_\_\_

**SPECIAL SEGMENTS IN TRIANGLES**

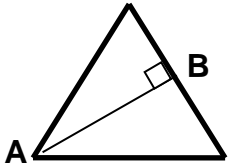
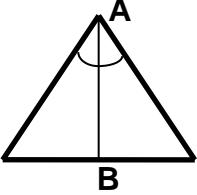
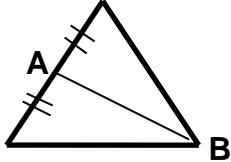
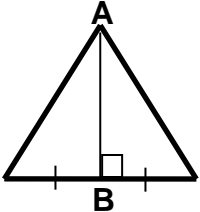
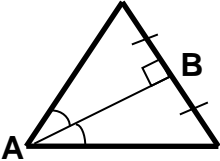
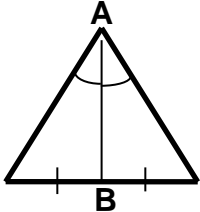
Based on the markings below, tell whether  $\overline{AB}$  in each triangle is a:

A. Altitude

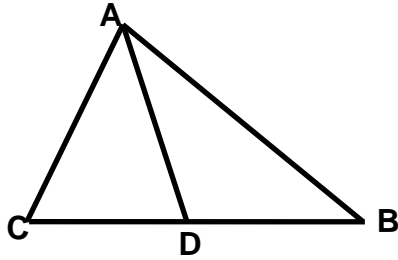
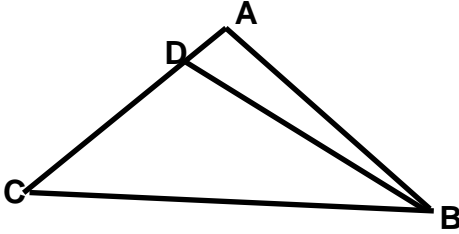
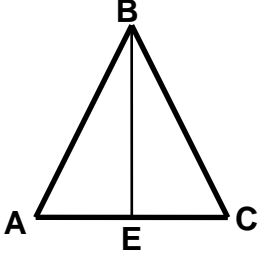
B. Median

C. Neither

List all that apply.

<p>_____ 1.</p>	
<p>_____ 2.</p>	
<p>_____ 3.</p>	
<p>_____ 4.</p>	
<p>_____ 5.</p>	
<p>_____ 6.</p>	

Find the indicated values.

<p>7. <math>BD =</math> _____</p> <p><math>CD =</math> _____</p> <p><math>AC =</math> _____</p>	<p><math>\overline{AD}</math> is a median in <math>\triangle ABC</math>, if <math>BD = 5x - 8</math>, <math>CD = 3x + 12</math>, and <math>AC = 7x - 14</math>. Find the length of all three segments.</p> 
<p>8. <math>x =</math> _____</p>	<p><math>\overline{BD}</math> is an altitude in <math>\triangle ABC</math>, find the value of 'x' if <math>m\angle ADB = (6x - 18)^\circ</math>.</p> 
<p>9. _____</p>	<p>Suppose <math>\overline{BE}</math> is an altitude and <math>m\angle A = 60^\circ</math>. Find <math>m\angle ABE</math>.</p> 
<p>10. <math>EC =</math> _____</p>	<p>Suppose <math>\overline{BE}</math> and <math>\overline{CD}</math> are medians. If <math>AD = 3x + 4</math>, <math>AE = 7x - 2</math> and <math>BD = 2x + 6</math>, then find <math>EC</math>.</p> 