



### Lesson 2.1 Practice Sheet

Write a conjecture that describes the pattern in each sequence. Then use your conjecture to find the next item in the sequence.

<p>1. Costs: \$4.50, \$6.75, \$9.00, . . .</p>	<p>2. Appointment times: 10:15am, 11:00am, 11:45am, . . .</p>
<p>3.</p> <div style="text-align: center;">  </div>	<p>4.</p> <div style="text-align: center;">  </div>
<p>5. 3, 3, 6, 9, 15, . . .</p>	

Make a conjecture about each value or geometric relationship.

<p>6. the product of two even numbers</p>	<p>7. the relationship between <math>a</math> and <math>b</math> if <math>a + b = 0</math>.</p>
<p>8. the relationship between the set of points in a plane equidistant from Point A.</p>	

Refer to the table of the number of wireless subscriptions in the United States by year.

9. Make a graph that shows U.S. wireless use from 2002 to 2007.
10. Make a conjecture about U.S. wireless use in 2012.

U.S. Wireless Subscribership	
Year	Subscribers (Millions)
2002	140.8
2003	158.7
2004	182.1
2005	207.9
2006	233.0
2007	255.4

Source: Cellular Telecommunications and Internet Association



Find a counterexample to show that each conjecture is false.

11. If  $\angle A$  and  $\angle B$  are complementary angles, then they share a common side.

12. If a ray intersects a segment at its midpoint, then the ray is perpendicular to the segment.