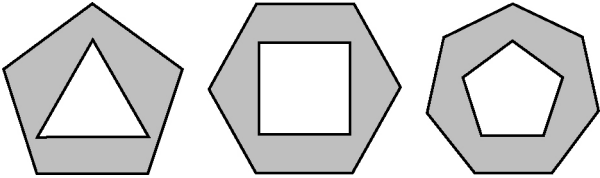


Chapter 10 Gifted and Enrichment

<p>1. Identify the pattern in the following set of numbers. 8, 5, 4, 9, 1, 7, 6, 3, 2, 0</p>	<p>2. Each of the following patterns of numbers has a number missing. Complete each pattern, and explain what the pattern is.</p> <p>a) 1, 2, 6, 24, 120, <input type="text"/></p> <p>b) 1, 2, 3, 5, 8, 13, <input type="text"/></p> <p>c) 2, 5, 7, 12, 19, <input type="text"/></p> <p>d) 2, 5, 8, 11, 14, <input type="text"/></p> <p>e) 3, 8, 5, 10, 7, <input type="text"/></p>
<p>3. The following pattern of shapes is arranged in order from left to right.</p> <p>a) Create an expression for the shapes.</p> <p>b) Predict the characteristics of the next shape in the pattern and draw it.</p> <div data-bbox="203 1073 799 1249" data-label="Image"></div>	<p>4. An online music store has the following pricing system for downloading songs: For the first song, you pay \$2.00. Each additional song costs \$0.20 less than the previous song. So, the second song costs \$1.80, the third song costs \$1.60, and so on up to ten songs. If you download more than ten songs, each song after song 10 will cost the same as song 10.</p> <p>a) Make a table of values showing the cost of one song, from song 1 to song 12. Graph the values.</p> <p>b) Create an expression for determining the cost of any one song, from song 1 to song 10.</p>