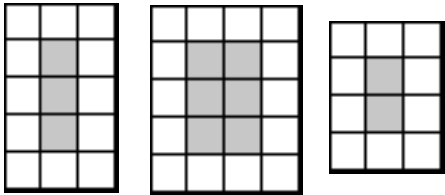


<p>A bar chart could be used. The y-axis could be labeled "Number of awards", with 0, 1, 2, 3 labeled. The x-axis could contain the amounts, one at \$1000, \$1500, \$2000, \$2500, \$3000, \$4000, and \$6000. The bars would rise as high as the number of awards for each dollar amount.</p> <p>© Olympia High School (2004) 1</p>	<p>There is a notable, marked dropoff in ridership after 2001, which can easily be explained by historical events. After this, there is a steady increase in ridership, with no downturn. Therefore, the data shows a growing business, and growing revenues, indicating that the future looks bright for Comfort Airlines. (This assumes that ridership is directly proportional to revenues for the company, and does not take into account other factors that may be damaging business, such as higher gas prices.)</p> <p>© Olympia High School (2004) 2</p>
<p>d. #2, #1, #4, #3</p> <p>© Olympia High School (2004) 3</p>	<p>Damien's answer is correct. He multiplied the coefficients of the terms of the polynomials to populate the grid. He then added diagonally to determine the coefficients of the product. Further, he knew that the sum of the degrees of the original polynomials is the degree of the product, so the leading term needs to be third degree.</p> <p>© Olympia High School (2004) 4</p>
<p>Dial-up plan \$239.88 per year (\$19.99)(12 months).</p> <p>Prepaid plan $(225)(.80) = 180$ credit card transactions per day. The number of hours required for the annual credit card transactions is calculated as follows:</p> $\frac{180 \text{ transactions}}{\text{day}} \cdot \frac{363 \text{ days}}{\text{yr}} \cdot \frac{12 \text{ sec}}{\text{transaction}} \cdot \frac{1 \text{ hr}}{3600 \text{ sec}} = 217.80 \text{ hrs}$ <p>Since time must be purchased in 20 hour increments, 220 hours of internet time would need to be purchased costing \$220 (\$1 per hour). Therefore, the prepaid plan is \$19.88 less than the dial-up plan (less if you consider that the extra minutes could be carried over to the following year). From this standpoint, the prepaid plan should be chosen. However, one could make the argument that the convenience of the dial-up plan is worth the extra \$19.88 per year.</p> <p>© Olympia High School (2004) 5</p>	<p>The volume of the wooden block is 60 square inches or 60 one inch blocks. There are two of each of the following faces on the block. The shaded squares are the faces of the cubes that are painted on one side only. There are a total of 11×2 or 22 of them. Therefore, the probability is $22/60$ or $11/30$ (d).</p>  <p>© Olympia High School (2004) 6</p>