

Charts- Level 1

No Calculator

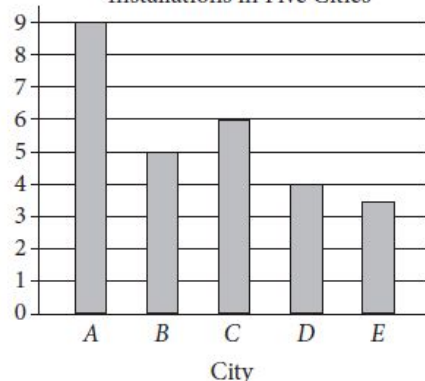
1

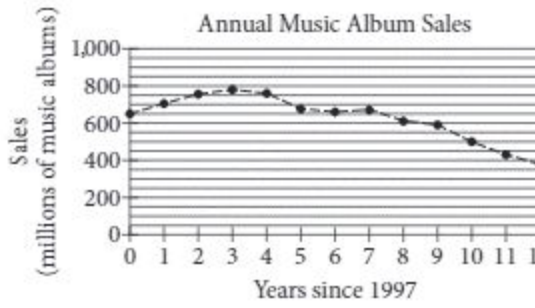
Gender	Age		Total
	Under 40	40 or older	
Male	12	2	14
Female	8	3	11
Total	20	5	25

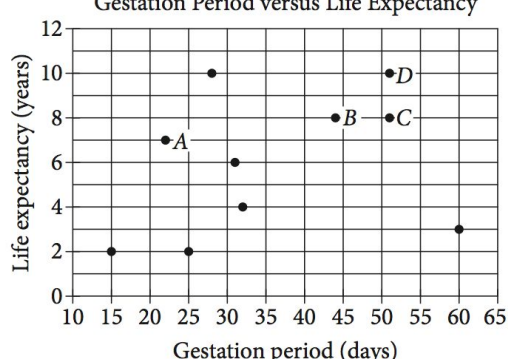
The table above shows the distribution of age and gender for 25 people who entered a contest. If the contest winner will be selected at random, what is the probability that the winner will be either a female under age 40 or a male age 40 or older?

- A) $\frac{4}{25}$
- B) $\frac{10}{25}$
- C) $\frac{11}{25}$
- D) $\frac{16}{25}$

No Calculator

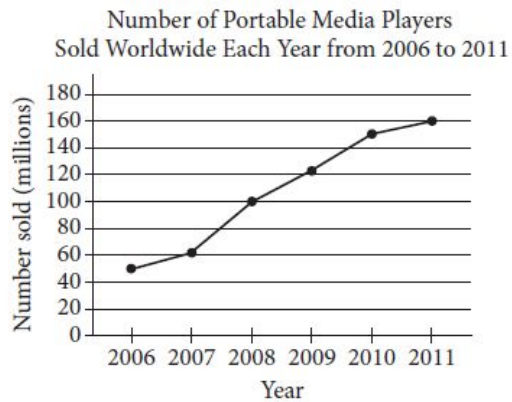
2	<p style="text-align: center;">Rooftop Solar Panel Installations in Five Cities</p>  <p style="text-align: center;">City</p> <p>The number of rooftops with solar panel installation in 5 cities is shown in the graph above. If the total number of installations is 27,500, what is an appropriate label for the vertical axis of the graph?</p> <p>A) Number of installations (in tens) B) Number of installations (in hundreds) C) Number of installations (in thousands) D) Number of installations (in tens of thousands)</p>	<p>With Calculator</p>																																															
3	<p style="text-align: center;">Number of Registered Voters in the United States in 2012, in Thousands</p> <table border="1" style="margin: auto; border-collapse: collapse; text-align: center;"> <thead> <tr> <th rowspan="2">Region</th> <th colspan="5">Age, in years</th> <th rowspan="2">Total</th> </tr> <tr> <th>18 to 24</th> <th>25 to 44</th> <th>45 to 64</th> <th>65 to 74</th> <th>75 and older</th> </tr> </thead> <tbody> <tr> <td>Northeast</td> <td>2,713</td> <td>8,159</td> <td>10,986</td> <td>3,342</td> <td>2,775</td> <td>27,975</td> </tr> <tr> <td>Midwest</td> <td>3,453</td> <td>11,237</td> <td>13,865</td> <td>4,221</td> <td>3,350</td> <td>36,126</td> </tr> <tr> <td>South</td> <td>5,210</td> <td>18,072</td> <td>21,346</td> <td>7,272</td> <td>4,969</td> <td>56,869</td> </tr> <tr> <td>West</td> <td>3,390</td> <td>10,428</td> <td>11,598</td> <td>3,785</td> <td>2,986</td> <td>32,187</td> </tr> <tr> <td>Total</td> <td>14,766</td> <td>47,896</td> <td>57,795</td> <td>18,620</td> <td>14,080</td> <td>153,157</td> </tr> </tbody> </table> <p>The table above shows the number of registered voters in 2012, in thousands, in four geographic regions and five age groups. Based on the table, if a registered voter who was 18 to 44 years old in 2012 is chosen at random, which of the following is closest to the probability that the registered voter was from the Midwest region?</p> <p>A) 0.10 B) 0.25 C) 0.40 D) 0.75</p>		Region	Age, in years					Total	18 to 24	25 to 44	45 to 64	65 to 74	75 and older	Northeast	2,713	8,159	10,986	3,342	2,775	27,975	Midwest	3,453	11,237	13,865	4,221	3,350	36,126	South	5,210	18,072	21,346	7,272	4,969	56,869	West	3,390	10,428	11,598	3,785	2,986	32,187	Total	14,766	47,896	57,795	18,620	14,080	153,157
Region	Age, in years					Total																																											
	18 to 24	25 to 44	45 to 64	65 to 74	75 and older																																												
Northeast	2,713	8,159	10,986	3,342	2,775	27,975																																											
Midwest	3,453	11,237	13,865	4,221	3,350	36,126																																											
South	5,210	18,072	21,346	7,272	4,969	56,869																																											
West	3,390	10,428	11,598	3,785	2,986	32,187																																											
Total	14,766	47,896	57,795	18,620	14,080	153,157																																											
	<p>With Calculator</p>																																																

<p>4</p>	<p>The graph below shows the total number of music album sales, in millions, each year from 1997 through 2009.</p>  <p>Based on the graph, which of the following best describes the general trend in music album sales from 1997 through 2009 ?</p> <p>A) Sales generally increased each year since 1997. B) Sales generally decreased each year since 1997. C) Sales increased until 2000 and then generally decreased. D) Sales generally remained steady from 1997 through 2009.</p>	<p>With Calculator</p>																												
<p>5</p>	<p>Ages of the First 12 United States Presidents at the Beginning of Their Terms in Office</p> <table border="1" data-bbox="332 1165 836 1501"> <thead> <tr> <th>President</th> <th>Age (years)</th> <th>President</th> <th>Age (years)</th> </tr> </thead> <tbody> <tr> <td>Washington</td> <td>57</td> <td>Jackson</td> <td>62</td> </tr> <tr> <td>Adams</td> <td>62</td> <td>Van Buren</td> <td>55</td> </tr> <tr> <td>Jefferson</td> <td>58</td> <td>Harrison</td> <td>68</td> </tr> <tr> <td>Madison</td> <td>58</td> <td>Tyler</td> <td>51</td> </tr> <tr> <td>Monroe</td> <td>59</td> <td>Polk</td> <td>50</td> </tr> <tr> <td>Adams</td> <td>58</td> <td>Taylor</td> <td>65</td> </tr> </tbody> </table> <p>The table above lists the ages of the first 12 United States presidents when they began their terms in office. According to the table, what was the mean age, in years, of these presidents at the beginning of their terms? (Round your answer to the nearest tenth.)</p>	President	Age (years)	President	Age (years)	Washington	57	Jackson	62	Adams	62	Van Buren	55	Jefferson	58	Harrison	68	Madison	58	Tyler	51	Monroe	59	Polk	50	Adams	58	Taylor	65	<p>With Calculator</p>
President	Age (years)	President	Age (years)																											
Washington	57	Jackson	62																											
Adams	62	Van Buren	55																											
Jefferson	58	Harrison	68																											
Madison	58	Tyler	51																											
Monroe	59	Polk	50																											
Adams	58	Taylor	65																											

6	<p>Movies with Greatest Ticket Sales in 2012</p> <table border="1"> <thead> <tr> <th rowspan="2">MPAA rating</th> <th colspan="4">Type of movie</th> <th rowspan="2">Total</th> </tr> <tr> <th>Action</th> <th>Animated</th> <th>Comedy</th> <th>Drama</th> </tr> </thead> <tbody> <tr> <td>PG</td> <td>2</td> <td>7</td> <td>0</td> <td>2</td> <td>11</td> </tr> <tr> <td>PG-13</td> <td>10</td> <td>0</td> <td>4</td> <td>8</td> <td>22</td> </tr> <tr> <td>R</td> <td>6</td> <td>0</td> <td>5</td> <td>6</td> <td>17</td> </tr> <tr> <td>Total</td> <td>18</td> <td>7</td> <td>9</td> <td>16</td> <td>50</td> </tr> </tbody> </table> <p>The table above represents the 50 movies that had the greatest ticket sales in 2012, categorized by movie type and Motion Picture Association of America (MPAA) rating. What proportion of the movies are comedies with a PG-13 rating?</p> <p>A) $\frac{2}{25}$</p> <p>B) $\frac{9}{50}$</p> <p>C) $\frac{2}{11}$</p> <p>D) $\frac{11}{25}$</p>	MPAA rating	Type of movie				Total	Action	Animated	Comedy	Drama	PG	2	7	0	2	11	PG-13	10	0	4	8	22	R	6	0	5	6	17	Total	18	7	9	16	50	With Calculator
MPAA rating	Type of movie				Total																															
	Action	Animated	Comedy	Drama																																
PG	2	7	0	2	11																															
PG-13	10	0	4	8	22																															
R	6	0	5	6	17																															
Total	18	7	9	16	50																															
7	<p>Gestation Period versus Life Expectancy</p>  <p>A curator at a wildlife society created the scatterplot above to examine the relationship between the gestation period and life expectancy of 10 species of animals.</p>	With Calculator																																		

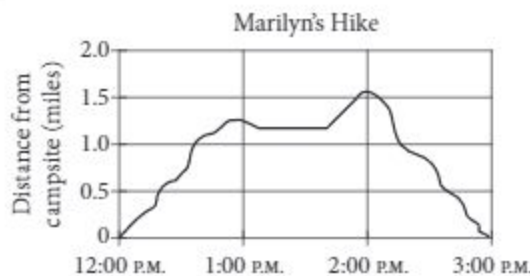
	<p>What is the life expectancy, in years, of the animal that has the longest gestation period?</p> <p>A) 3 B) 4 C) 8 D) 10</p>																			
8	<table border="1"><thead><tr><th>Planet</th><th>Acceleration due to gravity $\left(\frac{\text{m}}{\text{sec}^2}\right)$</th></tr></thead><tbody><tr><td>Mercury</td><td>3.6</td></tr><tr><td>Venus</td><td>8.9</td></tr><tr><td>Earth</td><td>9.8</td></tr><tr><td>Mars</td><td>3.8</td></tr><tr><td>Jupiter</td><td>26.0</td></tr><tr><td>Saturn</td><td>11.1</td></tr><tr><td>Uranus</td><td>10.7</td></tr><tr><td>Neptune</td><td>14.1</td></tr></tbody></table> <p>The chart above shows approximations of the acceleration due to gravity in meters per second squared $\left(\frac{\text{m}}{\text{sec}^2}\right)$ for the eight planets in our solar system. The weight of an object on a given planet can be found by using the formula $W = mg$, where W is the weight of the object measured in newtons, m is the mass of the object measured in kilograms, and g is the acceleration due to gravity on the planet measured in $\frac{\text{m}}{\text{sec}^2}$.</p>	Planet	Acceleration due to gravity $\left(\frac{\text{m}}{\text{sec}^2}\right)$	Mercury	3.6	Venus	8.9	Earth	9.8	Mars	3.8	Jupiter	26.0	Saturn	11.1	Uranus	10.7	Neptune	14.1	<p>What is the weight, in newtons, of an object on Mercury with a mass of 90 kilograms?</p> <p>A) 25 B) 86 C) 101 D) 324</p>
Planet	Acceleration due to gravity $\left(\frac{\text{m}}{\text{sec}^2}\right)$																			
Mercury	3.6																			
Venus	8.9																			
Earth	9.8																			
Mars	3.8																			
Jupiter	26.0																			
Saturn	11.1																			
Uranus	10.7																			
Neptune	14.1																			

9



According to the line graph above, the number of portable media players sold in 2008 is what fraction of the number sold in 2011 ?

10



The graph above shows Marilyn's distance from her campsite during a 3-hour hike. She stopped for 30 minutes during her hike to have lunch. Based on the graph, which of the following is closest to the time she finished lunch and continued her hike?

- A) 12:40 P.M.
- B) 1:10 P.M.
- C) 1:40 P.M.
- D) 2:00 P.M.