

① An inference is based on data or reasoning, but a guess may not be.

② $\frac{5}{45} = \frac{x}{375}$

$$\begin{array}{r} 45x \approx 1375 \\ \hline 45 \\ \hline x \approx 30.5 \end{array}$$

$x \approx 31$

⑤ mean age ≈ 22

The mean age of the sample is about 22, so the mean age of the visitors to the park should be about 22.

⑥ $\frac{16}{30} \approx 53\%$ The percent of visitors to the park under the age of 18 in the sample is about 53%, so the percent of all visitors should be about 53%.

⑦ $\frac{6}{30} = 20\%$ The percent of visitors to the park who are 35 and over is 20% in the sample, so the percent of all visitors should be 20%.

⑧ about 16 The median age of visitors to the park in the sample is about 16, so the median age of all visitors should be about 16.

⑨ $\frac{1 \cdot 1 = 1}{2 \cdot 2 = 4}$
 $\frac{3 \cdot 7 = 21}{4 \cdot 4 = 16}$
 $\frac{5 \cdot 1 = 5}{6 \cdot 2 = 12}$
 $\frac{20}{20} = 1$

⑩ $\frac{1 \cdot 1 = 1}{2 \cdot 1 = 2}$
 $\frac{3 \cdot 4 = 12}{4 \cdot 10 = 40}$
 $\frac{5 \cdot 1 = 5}{6 \cdot 2 = 12}$
 $\frac{20}{20} = 1$

⑪ $3.9 - 3.4 = 0.5$

$\frac{3.9 + 3.7 + 3.4}{3} = 3.66$

The mean length of the words in the book is about 3.7 letters.

⑫ $\frac{11}{40} = \frac{x}{250}$

$$\begin{array}{r} 40x \approx 2750 \\ \hline 40 \\ \hline x \approx 68.75 \end{array}$$

⑬ $\frac{10}{28} = \frac{x}{443}$

$$\begin{array}{r} 28x \approx 4430 \\ \hline 28 \\ \hline x \approx 158 \end{array}$$