

Error of Estimation

<p>Let's estimate 8×78. $78 \approx 80$ and $8 \times 80 = 640$.</p> <p>The exact calculation gives us $8 \times 78 = 624$.</p> <p>The difference between these two results is $640 - 624 = 16$. That is the error of estimation.</p>	<p>Let's estimate $6 \times \\$4.35$. $\\$4.35 \approx 4.50$ and $6 \times 4.50 = \\$27$.</p> <p>The exact calculation gives us $6 \times \\$4.35 = \\26.10.</p> <p>The difference between these two results is $\\$27 - \\$26.10 = \\$0.90$. That is the error of estimation.</p>
<p>The error of estimation is the <i>difference</i> between the estimated result and the exact result. The error tells you how much "off" you were.</p>	

1. First estimate the products, then calculate the exact result, and then find the error of estimation.

<p>a. Estimation: $4 \times 91 \approx$</p> <p>Exact: $4 \times 91 = 364$</p> <p>Error of estimation <u>4</u></p>	<p>b. Estimation: $5 \times 67 \approx$</p> <p>Exact: $5 \times 67 = 335$</p> <p>Error of estimation _____</p>
<p>c. Estimation: $6 \times 34 \approx$</p> <p>Exact: $6 \times 34 = 204$</p> <p>Error of estimation _____</p>	<p>d. Estimation: $7 \times 59 \approx$</p> <p>Exact: $7 \times 59 = 413$</p> <p>Error of estimation _____</p>
<p>e. Estimation: $9 \times 68 \approx$</p> <p>Exact: $9 \times 68 = 612$</p> <p>Error of estimation _____</p>	<p>f. Estimation: $9 \times 113 \approx$</p> <p>Exact: $9 \times 113 = 1017$</p> <p>Error of estimation _____</p>
<p>g. Estimation: $8 \times 242 \approx$</p> <p>Exact: $8 \times 242 = 1936$</p> <p>Error of estimation _____</p>	<p>h. Estimation: $5 \times 693 \approx$</p> <p>Exact: $5 \times 693 = 3465$</p> <p>Error of estimation _____</p>