

## Estimating Calculations

Question	Values Rounded to 1 sf			Calculation	Estimated Answer	Overestimate or Underestimate?	Actual Answer
$3.3 \times 2194 \times 1.2$	3.3	2194	1.2			<i>Underestimate</i>	8688.24
	3	2000	1				
$\begin{array}{r} 17.8 + 67.3 \\ \hline 12.29 \end{array}$	17.8	67.3	12.29	$\begin{array}{r} 20 + 70 \\ \hline 10 \end{array}$		<i>Overestimate</i>	6.92
	20	70	10				
$\begin{array}{r} 47 \times 78.6 \\ \hline 0.53 \end{array}$	47	78.6	0.53	$\begin{array}{r} 50 \times 80 \\ \hline 0.5 \end{array}$			
$\begin{array}{r} 1.78^3 \\ \hline 62.1 + 43.3 \end{array}$	1.78	62.1	43.3				
$\begin{array}{r} \sqrt{103} \\ \hline 0.98 \times 19 \end{array}$	103	0.98	19				
$\begin{array}{r} 5.34 + 3.296 \\ \hline 0.195 \end{array}$	5.34	3.296	0.195				
$\begin{array}{r} (4.12 \times 0.53)^2 \\ \hline \sqrt[3]{7.97} \end{array}$	4.12	0.53	7.97				

