| Calculating with Upper and Lower Bounds |  |  |  |
| :---: | :---: | :---: | :---: |
| Given that $a$ is 40 to the nearest 10 and $b$ is 8 correct to the nearest integer: | Given that $e$ is 20 correct to the nearest five and $f$ is 2.5 correct to 1 decimal place: | Given that $p$ is 200 to 1 significant figure and $q$ is 25 to 2 significant figures: | Given that $x$ is 3 to the nearest integer, $y$ is 1.5 to the nearest tenth and $z$ is 12 to 2 significant figures: |
| (a) | (d) | (g) | (j) |
| Find the upper and lower bounds of $10 a$ | Find the upper and lower bounds of $e-f$ | Find the upper and lower bounds of $\sqrt{p}$ | Find the upper and lower bounds of $2(x+z-y)$ |
| (b) | (e) | (h) | (k) |
| Find the upper and lower bounds of $a+b$ | Find the upper and lower bounds of $\frac{e}{f}$ | Find the upper and lower bounds of $\frac{1000}{p q}$ | Find the upper and lower bounds of $\frac{z}{x-y}$ |
| (c) | (f) | (i) | (I) |
| Find the upper and lower bounds of $a \times b$ | Find the upper and lower bounds of $e^{2}$ | Find the upper and lower bounds of $\sqrt{\frac{1}{p-q}}$ | Find the upper and lower bounds of $z-x \times 2^{y}$ |

