

Upper and Lower Bounds *ramp up*

ANSWERS

a $x = 4$ to 1 sf. Find the upper bound of $10 - x$. 6.5 taking a bound from a number	b $x = 0.5$ to 1 dp. Find the lower bound of x^2. 0.2025 squaring a decimal bound	c $a = 3.4$ to 1 dp. Write the error interval for $2a$. $6.7 \leq 2a < 6.9$ the error interval of a result	d $a = 2.3$, truncated to 1 dp, and $b = 4$ to 1 sf. Find the lower bound of ab. 8.05 a truncated value and a rounded one
e $x = -3$ to 1 sf. Find the upper bound of x^2. 12.25 squaring a negative bound	f $x^2 = 20$ to the nearest 10 and x is positive. Find the upper bound of x. 5 a bound back through a power	g Each number is to 1 sf. Find the lower bound of $\frac{8-2}{6-3}$. 1.25 a difference underneath	h $x = 2$ and $y = 4$ to 1 sf. Find the upper bound of $\frac{1}{x} - \frac{1}{y}$. $\frac{4}{9}$ a difference of reciprocals
i $x = 4$ and $y = 2$, each to 1 sf. Find the upper bound of $\frac{x}{x+y}$. 0.75 a letter on the top and the bottom	j $a = 6$ to 1 sf and b is to 1 dp. The upper bound of $a + b$ is 9.85. Find b. $b = 3.3$ back from a combined bound	k $4x$ has bounds 18 and 22. How was x rounded? to the nearest whole number back to the degree of accuracy	l $x = 6$ to 1 sf. Find the upper bound of $x^2 - 4x$. 16.25 one letter twice in a quadratic

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