

Upper and Lower Bounds *ramp up*

ANSWERS

a $x = 40$ to the nearest 5. Find the lower bound of x. <u>37.5</u> rounded to the nearest 5	b $x = 0.07$ to 1 significant figure. Find the upper bound of x. <u>0.075</u> a small number to 1 sf	c $x = 12.0$ to 3 significant figures. Find the lower bound of x. <u>11.95</u> a zero that is a significant figure	d $x = 2.4$ to 1 dp. Find the upper bound of $5x$. <u>12.25</u> a multiple of a bound
e $a = 8.6$ and $b = 2.3$, each to 1 dp. Find the lower bound of $a - b$. <u>6.2</u> a lower bound of a difference	f $x = 2$ to 1 sf. Find the lower bound of $\frac{12}{x}$. <u>4.8</u> a number divided by a bound	g $x = 6.2$ to 1 dp. Find the upper bound of $\sqrt{x}$. <u>2.5</u> the root of a bound	h $x = 3$ and $y = 2$, each to 1 sf. Find the upper bound of $x^2 - y$. <u>10.75</u> a power and a difference
i $a = 6$, $b = 3$ and $c = 2$, each to 1 sf. Find the lower bound of $\frac{ab}{c}$. <u>5.5</u> a product over a bound	j $a = 5.2$ to 1 dp and $b = 5.17$ to 2 dp. Could a be smaller than b? <u>Yes ($5.15 < 5.175$)</u> comparing two intervals	k x is rounded to 1 dp. Its upper bound is 7.25. Find the rounded value. <u>7.2</u> back from a bound	l $x = 5.3$ to 1 dp. Write $3x$ to a suitable degree of accuracy. <u>16</u> a result to a suitable accuracy

The Maths Habit

Upper and Lower Bounds *ramp up*

ANSWERS

a $x = 40$ to the nearest 5. Find the lower bound of x. <u>37.5</u> rounded to the nearest 5	b $x = 0.07$ to 1 significant figure. Find the upper bound of x. <u>0.075</u> a small number to 1 sf	c $x = 12.0$ to 3 significant figures. Find the lower bound of x. <u>11.95</u> a zero that is a significant figure	d $x = 2.4$ to 1 dp. Find the upper bound of $5x$. <u>12.25</u> a multiple of a bound
e $a = 8.6$ and $b = 2.3$, each to 1 dp. Find the lower bound of $a - b$. <u>6.2</u> a lower bound of a difference	f $x = 2$ to 1 sf. Find the lower bound of $\frac{12}{x}$. <u>4.8</u> a number divided by a bound	g $x = 6.2$ to 1 dp. Find the upper bound of $\sqrt{x}$. <u>2.5</u> the root of a bound	h $x = 3$ and $y = 2$, each to 1 sf. Find the upper bound of $x^2 - y$. <u>10.75</u> a power and a difference
i $a = 6$, $b = 3$ and $c = 2$, each to 1 sf. Find the lower bound of $\frac{ab}{c}$. <u>5.5</u> a product over a bound	j $a = 5.2$ to 1 dp and $b = 5.17$ to 2 dp. Could a be smaller than b? <u>Yes ($5.15 < 5.175$)</u> comparing two intervals	k x is rounded to 1 dp. Its upper bound is 7.25. Find the rounded value. <u>7.2</u> back from a bound	l $x = 5.3$ to 1 dp. Write $3x$ to a suitable degree of accuracy. <u>16</u> a result to a suitable accuracy

The Maths Habit