## Upper and Lower Bounds Revision

(a) $\quad$ (b)

Find the upper and lower bounds of 286 metres to the nearest metre.

$$
\begin{aligned}
U B & =286.5 \mathrm{~m} \\
L B & =285.5 \mathrm{~m}
\end{aligned}
$$

| (e) | (f) |
| :--- | :--- |
| Find the upper and lower |  |

bound of 80 cm to 1 significant figure.

| $U B$ | $=85 \mathrm{~cm}$ |
| ---: | :--- |
| $L B$ | $=75 \mathrm{~cm}$ |


|  |
| :--- |
| (i) |
| $a=c-b$ |

$c=18$ correct to 2 significant figures. $b=4.7$ correct to 1 decimal place. Find the upper and lower bounds of $a$.

$$
\begin{aligned}
& U B=13.85 \\
& L B=12.75
\end{aligned}
$$

Find the upper and lower bounds of 21 cm to the nearest cm.

$$
\begin{aligned}
U B & =21.5 \mathrm{~cm} \\
L B & =20.5 \mathrm{~cm}
\end{aligned}
$$

$$
\begin{aligned}
& U B=5.65 \mathrm{~kg} \\
& L B=5.55 \mathrm{~kg}
\end{aligned}
$$

(j) (k)

$$
p=\frac{q}{r}
$$

$q=20$ correct to 1 significant figure. $r=6.3$ correct to 1 decimal place. Find the lower bound of $p$ to 3 significant figures.
2.36
(c)

Find the upper and lower bounds of 7.8 cm to 1 decimal place.

$$
\begin{aligned}
& U B=7.85 \mathrm{~cm} \\
& L B=7.75 \mathrm{~cm}
\end{aligned}
$$

(g)

A square has a side length of
4.1 cm to 1 decimal place. Find the lower bound of the perimeter of the square.

$$
16.2 \mathrm{~cm}
$$

Find the upper and lower bounds of 5.24 kg to 2 decimal places.

$$
\begin{aligned}
U B & =5.245 \mathrm{~kg} \\
L B & =5.235 \mathrm{~kg}
\end{aligned}
$$

## (h)

A rectangle measures 10 cm by 15 cm , both to the nearest cm . Find the upper bound of the area of the rectangle.
$162.75 \mathrm{~cm}^{2}$
(I)

$$
x=\frac{3 a}{g-b}
$$

$d=46, e=8.5, f=15$, all correct to 2 significant figures.
Find the upper bound of $c$ to 2 decimal places.
2.62
$a=28, b=12, g=18$, all correct to 2 significant figures. Find the lower bound of $x$ to 3 significant figures.
11.8

