

a)  
 $a = 700$ , correct to the nearest hundred.  
 $b = 130$ , correct to the nearest ten.  
 $c = 20$ , correct to the nearest ten.

Find the **lowest** possible value of  $\frac{a-b}{c}$ .

What are the upper and lower bounds for $a$ ?	$650 \leq a < 750$
What are the upper and lower bounds for $b$ ?	$125 \leq b < 135$
What are the upper and lower bounds for $c$ ?	$15 \leq c < 25$
How do we <b>minimise</b> the calculation?	$\frac{a_{min} - b_{max}}{c_{max}}$
What is the lower bound for the calculation?	$\frac{650 - 135}{25} = \frac{515}{25} = 20.6$

b)  
 $a = 800$ , correct to the nearest hundred.  
 $b = 250$ , correct to the nearest ten.  
 $c = 30$ , correct to the nearest ten.

Find the **upper bound** of  $\frac{a-b}{c}$ .

What are the upper and lower bounds for $a$ ?	$750 \leq a < 850$
What are the upper and lower bounds for $b$ ?	$245 \leq b < 255$
What are the upper and lower bounds for $c$ ?	$25 \leq c < 35$
How do we <b>maximise</b> the calculation?	$\frac{a_{max} - b_{min}}{c_{min}}$
What is the upper bound for the calculation?	

c)

$a = 600$ , correct to the nearest hundred.

$b = 80$ , correct to the nearest ten.

$c = 40$ , correct to the nearest ten.

Find the **lowest** possible value of  $\frac{a}{b-c}$ .

What are the upper and lower bounds for $a$ ?	$550 \leq a < 650$
What are the upper and lower bounds for $b$ ?	$75 \leq b < 85$
What are the upper and lower bounds for $c$ ?	$35 \leq c < 45$
How do we <b>minimise</b> the calculation?	
What is the lower bound for the calculation?	

d)

$a = 520$ , correct to the nearest ten.

$b = 200$ , correct to the nearest hundred.

$c = 70$ , correct to the nearest ten.

Find the **upper bound** of  $\frac{a}{b-c}$ .