

1

First of all: $\max(x,y)$ and $\min(x,y)$ are just some functions defined as: $\max(x,y)$ =the maximum of x and y and $\min(x,y)$ =the minimum of x and y .

$\max(x,y)$ is defined as the maximum of x and y , and $\min(x,y)$ is defined as the minimum of x and y . What is the average of $\max(x,60)$ and $\min(40,x)$?

Question is: $average = \frac{\min(40,x) + \max(x,60)}{2} = ?$. Consider the following three cases:

If $x < 40$ then $\min(40,x) = x$, $\max(x,60) = 60$ and $average = \frac{x+60}{2} = ?$;

If $40 < x < 60$ then $\min(40,x) = 40$, $\max(x,60) = 60$ and $average = \frac{40+60}{2} = 50$;

If $x > 60$ then $\min(40,x) = 40$, $\max(x,60) = x$ and $average = \frac{40+x}{2} = ?$.

(1) $\min(x,60)=x \rightarrow$ just says that $x < 60$, so we have either the first or the second case. Not sufficient.

(2) $\max(40,x)=x \rightarrow$ just says that $x > 40$, so we have either the second or the third case. Not sufficient.

(1)+(2) $40 < x < 60$ so we have the second case: $\min(40,x) = 40$, $\max(x,60) = 60$
and $average = \frac{40+60}{2} = 50$. Sufficient.

Answer: C.

2

Each person on a committee with 40 members voted for exactly one of 3 candidates, F, G, or H. Did Candidate F receive the most votes from the 40 votes cast?

(1) Candidate F received 11 of the votes \rightarrow together G and H received $40-11=29$ votes, so either one received at least 15 votes, which means that F definitely did not receive the most votes. Sufficient.

(2) Candidate H received 14 of the votes \rightarrow if $F=15$ and $G=11$ then F received the most of the votes but if $F=13$ and $G=13$ then F did not receive the most votes. Not sufficient.

Answer: A.