

Correct. The difference between the guess ( $g$ ) and the actual weight (172) needs to be less than 5 for the owner to win. Since the guess could be greater than or less than 172, the absolute value symbol needs to be used around the difference in the problem. The absolute value of a difference is the same no matter which order the numbers are in, so  $|172 - g|$  will work just as well as  $|g - 172|$ . The only answer choice that would not work is where the absolute value is greater than 5.