

Exercise 5

The distance between a and b on the real line is $d(a, b) = \underline{\hspace{2cm}}$. So the distance between -5 and 2 is $\underline{\hspace{2cm}}$.

Solution

The distance on the real line is $d(a, b) = |b - a|$. For example, the distance between -5 and 2 is

$$d(-5, 2) = |2 - (-5)| = |7| = 7.$$