Exercise 76

Distance Find the distance between the given numbers.

(a)
$$\frac{7}{15}$$
 and $-\frac{1}{21}$ (b) -38 and -57 (c) -2.6 and -1.8

(b)
$$-38 \text{ and } -57$$

(c)
$$-2.6 \text{ and } -1.8$$

Solution

The distance between the numbers is the absolute value of their difference.

(a)
$$\left| \frac{7}{15} - \left(-\frac{1}{21} \right) \right| = \left| \frac{18}{35} \right| = \frac{18}{35}$$

(b)
$$|-38 - (-57)| = |19| = 19$$

(c)
$$|-2.6 - (-1.8)| = |-0.8| = 0.8$$