

Quiz 1

Compute $|2\sqrt{5} - 5| + |\sqrt{5} - 2|$.

Solution: Recall the definition of absolute value. Since $2\sqrt{5} - 5 < 0$, $|2\sqrt{5} - 5| = 5 - 2\sqrt{5}$, and since $\sqrt{5} - 2 > 0$, $|\sqrt{5} - 2| = \sqrt{5} - 2$, so the sum is $5 - 2\sqrt{5} + \sqrt{5} - 2 = 3 - \sqrt{5}$.