Class Practice on Distance

1. Find the distance between the points (-5, -3) and (7, 2). (Show the distance formula and your substitution into it.)

2. Find the distance between the points (-2, 1) and (3, -5). (Show the distance formula and your substitution into it.)
Answers

1. Find the distance between the points (-5, -3) and (7, 2). (Show the distance formula and your substitution into it.)

\[ d = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2} \]
\[ d = \sqrt{(-5 - 7)^2 + (-3 - 2)^2} \]
\[ d = \sqrt{(-12)^2 + (-5)^2} = \sqrt{144 + 25} = \sqrt{169} = 13 \]

2. Find the distance between the points (-2, 1) and (3, -5). (Show the distance formula and your substitution into it.)

\[ d = \sqrt{61} = 7.81 \]