Right Triangle

\[ a^2 + b^2 = c^2 \]

Pythagorean Theorem

Distance formula

Find the distance between \((7,12)\) and \((3, -2)\)

\[ c = \sqrt{(x_2-x_1)^2 + (y_2-y_1)^2} \]

\[ c = \sqrt{(2)^2 + (-6)^2} \]
\[ c = \sqrt{4 + 36} \]
\[ c = \sqrt{40} \]
\[ c \approx 6.3 \]