

# GetDistanceBetweenPoints3D

**Note:** This function is equivalent to the Vector3 class *getLength* method when used with a vector that holds the direction and distance between two points. In other words, it produces exactly the same result as subtracting the points' coordinates and getting the length of the result vector.

This function returns the distance between two 3 dimensional points using the pythagorean theorem.

## Syntax

```
float getDistanceBetweenPoints3D ( float x1, float y1, float z1, float x2, float y2, float z2 )
```

## Required Arguments

- **x1**: The X position of the first point
- **y1**: The Y position of the first point
- **z1**: The Z position of the first point
- **x2**: The X position of the second point
- **y2**: The Y position of the second point
- **z2**: The Z position of the second point

## Returns

Returns a float containing the distance between the two points as a float. Returns *false* if an argument passed was invalid.