

A scuba diver uses negative numbers to represent her depth below sea level. She started at a depth of -1.5 meters. Then she dove down to a depth of -4.2 meters. What is the difference between those depths?

Write an expression to represent the problem.

To find the difference, the operation to use is subtraction

$$-1.5 \boxed{-} (-4.2)$$

To subtract means to add its opposite.

$$-1.5 \boxed{-} (-4.2) = -1.5 \boxed{+} (4.2)$$

Use a vertical number line to add

Locate -1.5 on the number line.

From -1.5 , move 4.2 units up

$$-1.5 \boxed{-} (-4.2) = \underline{2.7}$$

The difference is 2.7 meters. This is the total distance the diver dove to reach her new depth.

