

Lesson 16 Summary

We can use variables and equations involving signed numbers to represent a story or answer questions about a situation.

For example, if the temperature is -3°C and then falls to -17°C , we can let x represent the temperature change and write the equation:

$$-3 + x = -17$$

We can solve the equation by adding 3 to each side. Since $-17 + 3 = -14$, the change is -14°C .

Here is another example: if a starfish is descending by $\frac{3}{2}$ feet every hour then we can solve

$$-\frac{3}{2}h = -6$$

to find out how many hours h it takes the starfish to go down 6 feet.

We can solve this equation by multiplying each side by $-\frac{2}{3}$. Since $-\frac{2}{3} \cdot -6 = 4$, we know it will take the starfish 4 hours to descend 6 feet.