

## F-BF Temperatures in degrees Fahrenheit and Celsius

## **Task**

Let f be the function that assigns to a temperature in degrees Celsius its equivalent in degrees Fahrenheit.

- a. The freezing point of water in degrees Celsius is 0 while in degrees Fahrenheit it is 32. The boiling point of water is 100 degrees Celsius and 212 degrees Fahrenheit. Given that the function f is linear, use this information to find an equation for f.
- b. Find the inverse of the function f and explain its meaning in terms of temperature conversions.
- c. Is there a temperature which is the same in degrees Celsius and in degrees Fahrenheit? Explain how you know.



F-BF Temperatures in degrees Fahrenheit and Celsius Typeset May 4, 2016 at 22:15:43. Licensed by Illustrative Mathematics under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License .