Temperature Conversions

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9:29 AM

Canada measures temperature in **Celsius**
US measure in **Fahrenheit**

↳ the SI system (metric) measures temperature in celsius

↳ 100 step system

freezing point of H_2O → boiling point of H_2O

$0°C \longrightarrow 100°C$

$32°F \longrightarrow 212°F$

Conversion formula

$°C \rightarrow °F$ $\quad F = \frac{9}{5}C + 32$ *

$°F \rightarrow °C$ $\quad C = \frac{5}{9}(F - 32)$ *

Ex. #1

(a.) convert $-4°F \longrightarrow °C$

division addition

B E D M A S

$C = \frac{5}{9}(F - 32)$

B E D M A S

(Brackets) (exponents) (multipl.) (subtraction)

$$C = \frac{5}{9}(F - 32)$$

$$= \frac{5}{9}(-4 - 32)$$

$$= \frac{5}{9}(-36)$$

$$= \frac{5 \cancel{(-36)}}{\cancel{9} \to 1} = \frac{-180}{9} = \boxed{-20^\circ C}$$

(b.) convert $-39^\circ C \longrightarrow {}^\circ F$

$$F = \frac{9}{5}C + 32$$

$$= \frac{9}{5}(-39) + 32$$

$$= \frac{\cancel{9} \to 1 \cancel{(-39)}}{\underline{5 \to 1}} + 32$$

$$= \frac{-351}{5} + 32$$

$$= \underline{-70.2} + 32 = \boxed{-38.2^\circ f}$$