

Q1 - Answer = c

Q2 - Problem A - Last name A-K

Nitrogen boils at a temperature of -320°F . What is this temperature in kelvins (K)?

A. -47

B. -160

C. 113

D. 95

E. 77

$$\begin{aligned} K &= 273 + ^{\circ}\text{C} = 273 + 5/9(^{\circ}\text{F}-32) \\ &= 273 + 5/9(-320-32) = 77 \end{aligned}$$

Q1 - Answer = c

Q2 - Problem B - Last Name L-Z

- Dry ice (CO₂) freezes at 194 K (kelvins). What is this temperature in °F?

A. -79

B. -142

C. 291

D. -47

E. -**110**

$$\begin{aligned}\text{°F} &= 32 + 9/5 \text{°C} = 32 + 9/5(\text{K} - 273) \\ &= 32 + 9/5(194 - 273) = -110\end{aligned}$$

V₁