

1-36 The temperature of a system rises by 130°C during a heating process. Express this rise in temperature in kelvins.

$$\Delta T (^{\circ}\text{C}) = 130^{\circ}\text{C}$$

$$\Delta T (\text{K}) = \Delta T (^{\circ}\text{C})$$

$$\Delta T (\text{K}) = 130 \text{ K}$$

1-47 A vacuum gage connected to a chamber reads 35 kPa at a location where the atmospheric pressure is 92 kPa. Determine the absolute pressure in the chamber.

$$P_{vac} = P_{atm} - P_{abs}$$

$$P_{abs} = P_{atm} - P_{vac}$$

$$= 92 - 35 = 57 \text{ kPa}$$