

Solution

$$1 \quad F = \frac{9}{5}(-30) + 32$$

$$= -27 \div 5 = -4,2$$

$$= -4,2 + 32$$

$$= 27,8 \text{ } ^\circ\text{F}$$

$$K = -30 + 273,15$$
$$= 243,15 \text{ } ^\circ\text{K}$$

$$2 \quad C = \frac{5}{9}(20 - 32)$$

$$= 5 \times (-12) = -70$$

$$= -70 \div 9 = 7,777778 \text{ } ^\circ\text{C}$$

$$3 \quad C = 273,15 - 273,15 = 0 \text{ } ^\circ\text{C}$$

$$F = \frac{9}{5}(273,15 - 273,15) + 32 = 0 \text{ } ^\circ\text{F}$$

$$= 9 \times 0 = 0$$

$$4 \quad K = 97 \text{ } ^\circ\text{C} + 273,15 = 370,15$$

$$f = \frac{9 \cdot 97}{5} + 32$$

$$= 873 \div 5 = 174,6$$

$$= 174,6 + 32 = 206,6^\circ\text{F}$$

$$5 \quad f = \frac{9 \cdot 37,5}{5} + 32$$

$$= 337,5 \div 5 = 67,5$$

$$= 67,5 + 32 = 99,5^\circ\text{F}$$