Unit 4.4 Interpolation on Linear Equations

1. Find the corresponding y value given the ordered pairs and x value

   a. (4,100) and (20, 420) where x = 12

      y = _____

   b. (1, 30) and (5,300) where x = 3.5

      y = _____

   c. (0,32) and (10, 212) where x = 8

      y = _____

   d. (0, 0) and (4095, 100) where x = 3010

      y = _____

2. If you have a temperature transmitter with an operating range of -40 to 150 °C and it outputs a value of 4 – 20 mA. Find the temperature value if the transmitter is outputting 10 mA

   Ordered pairs: _____

   Equation: _____

   Temp value at 10 mA = _____

3. If you have a pressure transmitter with an operating range of 30 to 3000 psi and it outputs a 1 to 10 V signal, what would be the corresponding pressure value if the transmitter is outputting 4.97 V

   Ordered pairs: _____

   Equation: _____

   Pressure value at 4.97 V = _____

4. If you have a pressure transducer that is designed for a 4-20 mA output, and has an operating range of 3-15 psi, what would the corresponding pressure be if the current is measured at 12 mA?

   Ordered pairs: _____

   Equation: _____

   Pressure value at 12 mA = _____