(1)

① i $\quad I = 0.00042\ H + 0.00026\ H \cdot P$

$\Rightarrow 0.00042 \times (mm)$ $\qquad \Rightarrow \left(0.00026 \times \dfrac{1}{mm}\right) \times mm \times mm$

$\Rightarrow 0.00042 \times \left(\dfrac{1}{25.4}\right) in \qquad \Rightarrow 0.0026 \times \dfrac{1 \times 25.4}{1 \times 1} \times \dfrac{1}{25.4} \ in \times \dfrac{1}{25}$

$\Rightarrow 0.000016\ H + 0.00010\ HP$

i $\quad B = 0.00061 \cdot P \cdot \dfrac{(T_s - T_a)}{e_s - e_a}$

$\Rightarrow [1] = \left(\dfrac{0.00061 \cdot \frac{1}{mb}}{(°C)}\right) mm \cdot \dfrac{(°C)}{mb}$

$\Rightarrow 0.00061 \cdot \left(33.8639\right) \cdot \dfrac{(25.4) P_{in\,Hg}) \cdot (32 + 1 \times 1.8)°F}{1 \ P_{in\,Hg} \cdot (32 + (T_c \times 1.8))°F \left(\frac{1}{33.8639}\right) P_{in\,Hg}}$

$\Rightarrow 0.0061 \times 1.33$

$\Rightarrow 0.0081$

$B = 0.0081 \ P \left(\dfrac{T_s - T_a}{e_s - e_a}\right)$