MAT 108-03 Answers to Assignment 1
Spring 2008

Page renumbering for Assignment 3 and Assignment 4 (which was incorrectly numbered #5): Assignment 3A, p. 205; Assignment 3B, p. 237; Assignment 4A, p. 210; Assignment 4B, p. 215.

Answers to Assignment 1:

A1. x = 10
A2. x = 4
A3. x ≈ - 4.57
A4. x = 14/5 = 2.8
A5. x=2
A6. 95º F

B1. $h = \frac{A}{Lw}$

B2. $t = T - \frac{I}{kL} = \frac{kLT - I}{kL}$

B3. $b = \frac{2A}{h}$

B4. $L = \frac{RD^2}{r}$

B5. $C = \frac{5}{9}(F - 32)$

B6. $B = \frac{2A}{h} - b = \frac{2A - bh}{h}$

B7. $v_1 = \frac{mv_2 - Ft}{m} = v_2 - \frac{Ft}{m}$

B8. $m = \frac{Ft}{v_2 - v_1}$

B9. $V = \frac{nRT}{P}$

Assignment 4

p. 237

#8 Each violates the rule that in (formal) scientific notation the number is written as $B \cdot 10^n$, where $1 \le |B| < 10$. Rewriting each in scientific notation, we have:

a. $2.5 \cdot 10^5$ **b.** $5.6 \cdot 10^{-4}$ c. $1.2 \cdot 10^{-4}$ **d**. $-4.2503 \cdot 10^4$