ADDITIONAL PAGE FOR ANSWERING QUESTION 1.

c. $K_c = \frac{[5.95 \times 10^{-3}\ mol\ L^{-1}][2.98 \times 10^{-3}\ mol\ L^{-1}]}{[.080\ mol\ L^{-1}]^2}$

$= .0165$

d. $P_{total} = P_{H_2} + P_{S_2} + P_{H_2S}$

$PV = nRT$ $\quad V = 1.25\ L$

$P = \frac{nRT}{V}$ $\quad n = 3.72 \times 10^{-3}\ mol$

$P = \frac{(3.72 \times 10^{-3}\ mol)(.0821\ atm\ mol^{-1}K^{-1})(483K)}{(1.25\ L)}$ $\quad R = .0821\ L\ atm\ mol^{-1}K^{-1}$

$T = 483K$

$= 1.18\ atm$

e. $H_2(g) + \frac{1}{2}S_2(g) \rightleftarrows H_2S(g)$ at 483K

This would equal to the inverse of the constant value in part B.

$= 60.6$

GO ON TO THE NEXT PAGE.