COMMON STOCK:

$g_{s_1} = 30\%$ $N_1 = 5$ $g_{s_2} = 20\%$ $N_2 = 6$ $g_n = 4\%$ $n \Rightarrow \infty$

$D_0 = .40$ /SH $k_e = 15\%$

FIND $P_{CS,8}$

$$P_8 = \frac{D_9}{(1+k_e)^1} + \frac{D_{10}}{(1+k_e)^2} + \frac{D_{11}}{(1+k_e)^3} + \frac{P_{11}}{(1+k_e)^3} \qquad P_{11} = \frac{D_{12}}{k_e - g_n}$$

$$= \frac{.40(1.3)^5(1.2)^4}{(1.15)^1} + \frac{.40(1.3)^5(1.2)^5}{(1.15)^2} + \frac{.40(1.3)^5(1.2)^6}{(1.15)^3} + \frac{P_{11}}{(1.15)^3}$$

$$P_{11} = \frac{.40(1.3)^5(1.2)^6(1.04)^1}{.15 - .04}$$

$= \$35.96$ /SH.

CONVERSION VALUE $= 4 \times 35.96 = \$143.83$

FIND $P_{CS,20}$

$$P_{20} = \frac{D_{21}}{k_e - g_n} = \frac{.40(1.3)^5(1.2)^6(1.04)^{10}}{.15 - .04} = \$59.68$$

CONVERSION VALUE $= 4 \times 59.68 = 238.71$

(c) COST OF RETAINED EARNINGS IS THE STOCKHOLDERS' REQUIRED RETURN $\therefore$ 15%