## Common Stock Valuation - Multiphase Model

Consider a firm with year end EPS projected to be $\$ 2.00$ and a required return of $12 \%$. The firm is expected to have two high growth phases and then stabilize at a long run growth rate as outlined in the table below. Initially the plow back ratio (k) is high but it is projected to decline to a long run value. Given the projections, what is the value of a share of this firm?

| Phase | Duration | Assumptions | End-of-Phase EPS |
| :---: | :---: | :--- | :--- |
| I | 5 years | $\mathrm{g}=18 \% \mathrm{k}=0.70$ | $\$ 2 \times(1.18)^{4}$ |
| II | 4 years | $\mathrm{g}=12 \% \mathrm{k}=0.55$ | $\$ 2 \times(1.18)^{4} \times(1.12)^{4}$ |
| III | Long Run | $\mathrm{g}=7 \% \mathrm{k}=0.40$ | -- |

