

**Quiz 2: Valuation**

Answer all questions and show necessary work. Please be brief. This is an open book, open notes exam.

1. Kaplan Enterprises is a mid-cap manufacturing company that generated an after-tax return on invested capital of 20% in the most recent twelve months and reported free cash flows to the firm (FCFF) of \$60 million during the period. If the company had \$1200 million in equity, \$800 million in debt and \$500 million in cash at the start of the period and expects to maintain its current return on capital and reinvestment rate next year, estimate its expected growth rate in operating income next year. (2 points)

2. You have been asked to complete a discounted cash flows, left incomplete by an analyst, who has projected out cash flows for the next three years and computed a present value of those cash flows:

	Most recent year	1	2	3
Expected growth		7.50%	7.50%	7.50%
EBIT (1-t)	\$ 60.00	\$ 64.50	\$ 69.34	\$ 74.54
+ Depreciation	\$ 14.00	\$ 15.05	\$ 16.18	\$ 17.39
- Cap Ex	\$ 50.00	\$ 53.75	\$ 57.78	\$ 62.11
FCFF	\$ 24.00	\$ 25.80	\$ 27.74	\$ 29.82
PV (@9%)		\$ 23.67	\$ 25.44	\$ 27.35

If you assume that growth after year 3 will drop to 3%, in perpetuity, but that the firm will continue to generate the same return on capital as it earned in the first 3 years, and face the same cost of capital as it has the first 3 years, estimate the value of the operating assets today. (4 points)

3. You have discounted the FCFF of Rapido Inc. at the cost of capital to arrive at a value for the operating assets of \$2.4 billion but have the following loose ends to tie up:
- The company has a cash balance of \$200 million and debt outstanding of \$500 million.
  - The company has a 75% holding in Clash Music Inc. and you used the fully consolidated financial statements in valuing Rapido. You believe that the value of all of the equity in Clash Music is \$1.2 billion.
  - Rapido has 200 million shares outstanding and 40 million management options. You believed the options have a value (using an option pricing model) of \$5/option.

Estimate the value per share in Rapido Inc.

(4 points)