Valuation Exercise

To do a discounted cash flow valuation of a firm and have been given the following partial inputs.The firm has a tax rate of 40%.

Year	1	2	3	4
Growth rate - g	20.00%	20.00%	20.00%	5.00%
EBIT (1-t)	$ 100.00	$ 120.00	$ 144.00	$ 151.20
Cost of Equity	15.00%	14.50%	14.00%	12.50%
Cost of Debt	7.00%	7.00%	7.00%	7.00%
Debt Ratio	10.00%	20.00%	30.00%	40.00%
Equity Ratio	90.00%	80.00%	70.00%	60.00%
Return on Capital - ROI	25.00%	25.00%	25.00%	15.00%

Results

	I. stage			II.stage	
EBIT (1-t)	$ 100.00	$ 120.00	$ 144.00	$ 151.20	
- Reinvestment	$ 80.00	$ 96.00	$ 115.20	$ 50.40	**Reinvestment = EBIT (1-t) * Re**
FCFF	$ 20.00	$ 24.00	$ 28.80	$ 100.80	**FCFF = EBIT (1-t) - Reinvestm**
Terminal Value				$ 2,411.48	**Terminal value=FCFF,II.stage**
Cost of Capital - WACC	13.92%	12.44%	11.06%	9.18%	**WACC = (Cost of Equity * Equ**
PV	**17.56**	**18.98**	**21.02**	**1,852.91**	**PV I.Stage=FCFF / (1-i)^n**
Value of Firm =	**$ 1,910.48**				**Value of firm=SUM of PV I.sta**
Reinvestment Rate	0.80	0.80	0.80	0.33	**Reinvestment Rate = g/ROC**

einvestment Rate
ent
/ (WACC-g)
ity Ratio) + (Cost of Debt * Debt Ratio * (1 - Tax Rate))
PV II.Stage=Terminal value / (1-i)^n
ge + II. stage