

**Module 14 – Financial Statement Analysis & Valuation, 4<sup>th</sup> Edition by Easton, McAnally, Sommers & Zhang**

**Solutions to Practice Quiz**

LO: 2

1. Answer: b

$$\$3,306 \text{ million} - (6.66\% \times \$10,215 \text{ million}) = \$2,626 \text{ million.}$$

LO: 2

2. Answer: d

BrandCo will earn a positive ROPI up to a WACC of 30.6%.

At this level of WACC, ROPI = (\$13,529 million) x 30.6% = \$4,140, the level of NOPAT.

LO: 2

3. Answer: a

Baker Company (\$millions)	Current 2013	Forecast Horizon				Terminal Year
		2014	2015	2016	2017	
Sales.....	\$2,785	\$3,838	\$5,289	\$7,288	\$10,043	\$10,244
NOPAT .....	330	455	627	864	1,190	1,214
NOA .....	533	735	1,012	1,395	1,922	1,961
ROPI Model						
ROPI (NOPAT - [NOA <sub>Beg</sub> × r <sub>w</sub> ]) .....		\$ 386	\$ 531	\$ 732	\$ 1,009	\$ 964
Discount factor [1 / (1 × r <sub>w</sub> ) <sup>t</sup> ] .....		0.88496	0.78315	0.69305	0.61332	
Present value of horizon ROPI .....		342	416	507	619	
Cum present value of horizon ROPI .....	\$1,884					
Present value of terminal ROPI .....	5,375					
NOA .....	533					
Total firm value .....	\$7,792					
Less NNO (Plus negative NNO) .....	(462)					
Firm equity value .....	8,254					
Shares outstanding (millions) .....	103.3					
Stock value per share .....	\$ 79.90					

LO: 2

4. Answer: c

(\$millions)

$$\begin{aligned} \text{NOA} &= \$20,513 - 1,072 - \$272 - \$1,256 - \$469 - \$989 - \$1,452 - \$3,866 \\ &= \$11,137 \end{aligned}$$

LO: 2

5. Answer: c

3M (\$millions)	Current	Forecast Horizon				Terminal Year
	2005	2006	2007	2008	2009	
Sales.....	\$21,167	\$22,395	\$23,694	\$25,068	\$26,522	\$26,787
NOPAT .....	3,306	3,498	3,701	3,916	4,143	4,184
NOA .....	11,137	11,787	12,471	13,194	13,959	14,098
ROPI Model						
ROPI (NOPAT – [NOA <sub>Beg</sub> × $r_w$ ]) .....		\$ 2,718	\$ 2,876	\$ 3,043	\$ 3,219	\$ 3,207
Discount factor [ $1 / (1 + r_w)^t$ ] .....		0.93458	0.87344	0.81630	0.76290	
Present value of horizon ROPI .....		2,540	2,512	2,484	2,456	
Cum present value of horizon ROPI ....	\$ 9,992					
Present value of terminal ROPI .....	40,777					
NOA .....	11,137					
Total firm value .....	61,906					
Less NNO .....	1,037					
Firm equity value .....	<u>\$60,869</u>					
Shares outstanding (millions) .....	754.5					
Stock value per share .....	<u>\$ 80.67</u>					