# Module 4 Practice Quiz 3

**6/6** points earned (100%)

Excellent!

Retake

[Course Home](https://www.coursera.org/learn/corporate-finance/home/welcome)

Correct

1 / 1 points

1. Consider the following data. The figures are in millions of dollars.

**Balance sheet**

|  |  |  |  |
| --- | --- | --- | --- |
| Cash | 5000 | Current liabilities | 5000 |
| Other current assets | 5000 | Long-term debt | 20000 |
| Non-current assets | 30000 | equity | 15000 |

**Income statement**

|  |  |
| --- | --- |
| Operating income | 8000 |
| Interest payments | 1000 |
| Other non-operating income | 300 |
| Income before taxes | 7300 |
| Taxes | 2190 |
| Net income | 5110 |

The company's OPAT is equal to \_\_\_\_\_\_\_\_\_\_.

1. 8,000
2. 5,110
3. **5,810**

**Correct Response**

OPAT = Operating income – taxes = 8,000 – 2,190 = 5,810

1. 5,600

Correct

1 / 1 points

2. Consider the following data. The figures are in millions of dollars.

**Balance sheet**

|  |  |  |  |
| --- | --- | --- | --- |
| Cash | 5000 | Current liabilities | 5000 |
| Other current assets | 5000 | Long-term debt | 20000 |
| Non-current assets | 30000 | equity | 15000 |

**Income statement**

|  |  |
| --- | --- |
| Operating income | 8000 |
| Interest payments | 1000 |
| Other non-operating income | 300 |
| Income before taxes | 7300 |
| Taxes | 2190 |
| Net income | 5110 |

The company's operating assets are equal to \_\_\_\_\_\_\_\_\_\_.

1. 25,000
2. **35,000**

**Correct Response**

Operating assets = Total assets minus cash = 35,000. Notice that total assets equal 40,000 in this case.

1. 15,000
2. 40,000

Correct

1 / 1 points

3. Consider the following data. The figures are in millions of dollars.

**Income statement**

|  |  |
| --- | --- |
| Operating income | 8000 |
| Interest payments | 1000 |
| Other non-operating income | 300 |
| Income before taxes | 7300 |
| Taxes | 2190 |
| Net income | 5110 |

If the required return on debt is 5%, the required return on equity is 15%, and the market value of equity is 50 billion dollars, the WACC is \_\_\_\_\_\_\_\_\_\_\_\_.

1. **11.7%**

**Correct Response**

The WACC is 5%\*(1 – 30%)\* (20/70) + 15%\*(50/70) = 11.7%.

Notice that the tax rate can be inferrred from the income statement (30% = 2,190/7300).

Notice that the the debt-value ratio is 20/ (20 + 50). You need to use the market value of equity.

1. 8.4%
2. 12.1%
3. 15%

Correct

1 / 1 points

4. Consider the following data. The figures are in millions of dollars.

**Balance sheet**

|  |  |  |  |
| --- | --- | --- | --- |
| Cash | 5000 | Current liabilities | 5000 |
| Other current assets | 5000 | Long-term debt | 20000 |
| Non-current assets | 30000 | equity | 15000 |

**Income statement**

|  |  |
| --- | --- |
| Operating income | 8000 |
| Interest payments | 1000 |
| Other non-operating income | 300 |
| Income before taxes | 7300 |
| Taxes | 2190 |
| Net income | 5110 |

EVA (economic value added) is equal to \_\_\_\_\_\_\_\_\_.

1. 2,130
2. 1,454
3. 1,680
4. **1,715**

**Correct Response**

EVA = OPAT – WACC\* Operating assets

Therefore, the EVA is 5,810 – 11.7%\*35,000 = 1,715

Correct

1 / 1 points

5. Your company’s WACC is 12%, and you are trying to decide whether to undertake an investment in a new technology that will change your company. The IRR of this new technology is 15%. Which of the following options is correct?

1. Since the IRR is greater than the WACC, the NPV of the new technology is positive.
2. Since the IRR is so high, you should go ahead and invest in the project.
3. Whether you invest in the project or not depends crucially on whether the company has sufficient cash to pay for the new project.
4. **You do not have sufficient information to make a decision on the project.**

**Correct Response**

The new technology is not a carbon-copy of the firm. Thus, you need to estimate the discount rate for the new technology before making a decision. Therefore, the correct option is" You do not have sufficient information to make a decision on the project."

Correct

1 / 1 points

6. Your company’s WACC is 10%. One of the divisions of your company has consistently generated a return on invested capital (OPAT divided by operating assets) equal to 8%. The CFO of your company has proposed that this division should be closed down or sold because it produces insufficient returns and thus negative EVA. Which of the following statements is incorrect?

1. You do not have sufficient information to compute the division’s EVA.
2. If the division’s WACC is 10% or greater, then the EVA is in fact negative.
3. The WACC for the division could be significantly lower than 10% if the division is less risky than the overall company.
4. **Because the EVA is consistently negative, you should sell the division unless the division managers presents a satisfactory restructuring plan.**

**Correct Response**

As we discussed in the lecture, the cost of capital for a division can be significantly different from the cost of capital for a company as a whole. Therefore, the wrong option is "Because the EVA is consistently negative, you should sell the division unless the division managers presents a satisfactory restructuring plan."