

Session 16A: Post class test solutions

1. **d. All of the above.** You have to find traded, similar companies, standardize prices to a common variable and adjust for differences across companies.
2. **c. 6.67.** To get the EV/EBITDA for the consolidated company, I first compute the market value of the 40% of Cyclops that does not belong to Oneida, which yields:
 - Market cap of 40% of Cyclops = $0.40 (2000) = 800$
 - Since the debt, cash and EBITDA numbers are already fully consolidated, you can now compute the EV/EBITDA multiple:
$$\text{EV/EBITDA} = (5000+800+ 1000-800)/ 900 = 6.67$$
3. **d. 9.25.** To estimate the EV to EBITDA for just the parent company, I have to clean up each of the numbers for Cyclop's holdings;
 - Parent company equity = $5000 -0.6 (2000) = 3800$
 - Parent company debt = $1000-400 = 600$
 - Parent company cash = $800 - 100 = 700$
 - Parent company EBITDA = $900-500 = 400$
 - Parent company EV/EBITDA = $(3800+600-700)/400 = 9.25$
4. **a. The average should be higher than the median.** The positive outliers will tend to pull the average up, above the median.
5. **a. The weighted average PE ratio across all firms.** The firms that you were unable to compute PE ratios for had negative earnings and positive market capitalizations. If you added their market capitalization to the market capitalization of the companies that you were able to compute the PE ratio for and added the net income (or loss) to the net income of the firms that you were able to compute the PE ratio for, you will end up with a lower aggregate PE ratios since the numerator will become higher and the denominator will become smaller.