9. The growth rate of real GDP per capita is equal to the growth rate of real GDP <u>minus</u> the growth rate of the population.   If the growth rate of population is 1 percent per year, how fast must real GDP grow for real GDP per capita to double in 14 years?
    The growth rate of real GDP per capita must be 70/14 = 5%. So the growth rate of real GDP must be 6%.

5. If we cannot measure every invention or new idea, how can we possibly measure the contribution of technological progress?
    We can measure the contribution of technological progress indirectly. We first measure output growth and measure the contributions to that growth from labor and capital. The difference between the two is technological progress.

6. Some economists argue that we gave entered a "new economy" with permanently higher productivity growth. How can growth accounting be used to evaluate this claim?
    Some economists demonstrated that technological progress of late 1990's was confined to a relatively small portion of the economy hence the claim that a "new economy" was on its way with "permanent" productivity growth was far from truth as evidenced by the most recent recession.

    9. Economic historians have found that the average height of individuals in both the United States and the United Kingdom fell during the mid 19th century before rising again. This was a period of rapid industrialization as well as migration into urban areas and foreign immigration. Incomes appeared to continue to rise. What factors do you think might account for this fall in height and how would it affect your evaluation of economic welfare during the period?
        It is likely that as the labor force became increasingly industrialized the nutrition in their diets fell. Therefore, the population became shorter.

10. Most law students tend to be in their twenties and thirties, rather than in their forties. Explain this phenomenon using the idea of investment in human capital.
    The opportunity cost for a law student is higher in his/her forties because the value of lost income is likely to be higher. Also, there is a higher return to the law school education for a student in his/her twenties and thirties because of a longer prospective law career.