

Notes 1.2 : Using Estimation Techniques to Problem Solve

Does it make sense that a person could earn \$364,000 a year when they only make \$25 an hour?

1) Round the world population (6,751,593,103) as follows:

- a. to the nearest billion b. to the nearest ten-thousand c. to the nearest hundred million

2) Round 3.141592, as follows:

- a. to the nearest hundredth b. to the nearest ten-thousandth c. to the nearest tenth

3) You and a friend ate lunch at Ye Olde Café. The check for the meal showed soup for \$2.40, tomato juice for \$1.25, a roast beef sandwich for \$4.60, a chicken salad sandwich for \$4.40, two coffees totaling \$1.40, apple pie for \$1.85, and chocolate cake for \$2.95.

- a. Find an estimate for the bill.
b. The total bill before tax was given as \$21.85. Is this amount reasonable?

4) A landscape architect who works full time earns \$52 per hour. (Full time work week is considered 40 hours)

- a. Estimate the landscape architect's weekly salary. b. Estimate the landscape architect's annual salary.

5) Your monthly rent is \$685 a month. Estimate your yearly rent.

6) An employee earns \$11.75 an hour. Estimate the annual income, assuming the employee works full-time.

7) An employee earns \$65,000 a year. Estimate the hourly wage, assuming the employee works full-time.

8) You lease a car for \$520 a month for 3 years. Estimate the cost of the lease.

9) Traveling between 45 and 55 miles per hour for 2 hours, estimate the distance traveled.

10) Traveling between 60 and 80 miles per hour for 6 hours, estimate the distance traveled.