



Supplemental Instruction Handouts

# Business Math

## Chapter 1

### Review and Application of Basic Math

1. You are paid an annual salary of \$43,500 based on a 35 hour workweek. What would be your gross pay for a period in which you worked 40 hours in the first week and 42 hours in the second week if you are paid bi – weekly? Assume the year has exactly 52 weeks. Also, overtime is paid at time and a half.
2. You are paid \$20.75 per hour and 1.5 times your regular pay for working on weekends or more than 7.5 hours on a weekday. Calculate your gross earnings for a week in which you worked 4, 4, 7.5, 9.5, 7.5, 8.5 and 7.5 on Saturday to Friday, respectively.
3. You work for a clothing manufacturer sewing garments. You earn \$9.50 per hour plus piece – work rate that depends on the type of garment that is currently being produced by the manufacturer. The current production run is for men’s shirts. You will be paid \$4.00 for each unit produced over the quota of 20 shirts in an eight hour shift. What is your total pay for a regular workweek in which your output on successive days is 22, 25, 24, 26 and 29 shirts?
4. You are paid on a graduated commission structure. You receive 5% on the first \$50,000 of sales in a month, 11% on the next \$50,000, and 18% on all further sales. If you sell \$125,000 worth of goods, how much commission would you earn?
5. Hank’s Propane Shop files quarterly GST returns. The purchases on which it paid the GST and the sales on which it collected the GST for the last four quarters were as follows:

Quarter	Purchases (\$)	Sales (\$)
1	684,125	846,250
2	1,051,250	759,375
3	762,585	989,565
4	867,955	1,025,325

Calculate the GST remittance or refund for each quarter.

6. Calculate the total amount, including GST and PST that an individual will pay for a car sold for \$28,650 in:
  - a) Alberta.
  - b) Manitoba.
  - c) Quebec.
  
7. If you own a \$300,000 home and the mill rate is 12.8434, how much property taxes will you have to pay?
  
8. Last year, the property values of a local municipality were assessed at \$5.85 billion. The current mill rate of the school tax component of property taxes is 6.8392. The total assessed property values of the municipality will remain the same this year. The school board requires an extra \$1,750,000 for its operating budget next year. At what value should the new mill rate be set?