

**GRADE 10 ESSENTIAL  
QUIZ WEEK TWO - 220915**

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**Instructions: (standard instructions)**

- Use a calculator where necessary unless indicated otherwise
- **Show work** for best mark.
- Open BOOK this time

1. Karen is 22 years old. Her cat has six toes. She works 35 hours a week while in College. Her rate of pay is \$16.50/hour. She had 30 hours of regular pay and 5 hours of overtime pay. Overtime is paid at 'time-and-a-half'.

She pays 7% of her taxable income to the Federal Government and 10% to the Provincial Government.

She has \$20/week put into a Registered Retirement Saving Plan (RRSP) by her payroll department which is untaxed. (With just that small amount of weekly contribution she will have \$175,000 when she retires). She pays 5.35% of her gross pay into the government retirement plan (CPP). And she has 1.95% of her gross deducted for Employment Insurance.

Calculate her Net Pay by **completing** a Net Pay Template provided.  
[6 marks]

2. Hailey worked the following hours last week:

M	T	W	Th	F	SA	Su
8	6	4	0	10	10	6

Her *regular* rate of pay is **\$12.50** / hour. She gets overtime rate of pay of time and a half, 1.5 times her regular pay after **8** hours in a day.

Calculate Hailey's Gross Pay for the week. [3 marks]

3. Two numbers multiply to make 30, their sum when added is 11.  
Determine the two numbers (show work!!) [2 marks]

4. Multiply and divide using the normal algorithms (step) [ **show work** ]  
[1 mark each]

a.  $185 * 6 =$

b.  $456 \div 6 =$

**Bonus Questions** (2 extra marks each marks *if* you need them)

- a. **Problem Solving.** Calculate how many different ways can Christina play each of her five favourite songs (once) in some order on her iPod. Show your method.
- b. If 5 bananas cost \$12, then calculate how much 22 bananas will cost.
- c. **Determine** the sum (add them all up) of all the counting numbers from 1 to 20. [Show how you figured it out]