

# Grade 10 Essentials Math

## Week 2 Quiz

### Debrief

23-09-14

MrF



# Did an hour of practice!!!!

Let's do  
Quiz

Start @  
10:10  
max 40 mins!  
should take 20?

Finish 11:00

Just use what we just did!  
(this time only)

USE OPEN BOOK ✓  
But cheat sheet has everything?

***Quiz every Thursday!***

***Alternate chance is the  
Friday!***

***I have been known if genuinely  
stuck at home, to send the quiz,  
on request, for timely completion***

# GRADE 10 ESSENTIAL

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

## QUIZ 230914 ~~WEEK 1~~ week 2

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

Show work for best mark.

Each individual question is worth one mark.

~~Closed Book~~. Use your **cheat sheet** (Reference Notes) or use mine (*for now*).

OPEN

1. Chantal worked the following hours last week:

M	T	W	Th	F	SA	Su
10	6	4	0	12	10	4

Reg 8	6	4	0	8	8	4 = 38.
O/T 2	0	0	0	4	2	0 = 8

Her *regular* rate of pay is \$14.25 / hour. She gets overtime rate of pay of 'time and half' (one and a half) times her regular pay after 8 hours in any day.

Determine Chantal's Gross Pay.

$$\begin{aligned} \text{Reg } 14.25 \cdot 38 &= 541.50 \\ \text{O/T } (14.25 \cdot 1.5) \cdot 8 &= 171.00 \\ \hline &= \$712.50 \end{aligned}$$



Here it is on my cheat sheet!

THINK! Explore

**UNIT B - PERSONAL FINANCE**

**GROSS** Income: All Income. **Bi-Weekly** = every two weeks

**NET INCOME**: Income after **deductions**

**NET = GROSS - (Income Taxes + CPP contributions + EI Contributions + Other Deductions)**

To calculate income taxes:

**Taxable income** = Gross - (Company Pension Contribution + RRSP Contribution + Union Dues Paid)

**Income tax(es)** = tax rate(s) \* Taxable income

You should tweak it up a bit! make your own!

5 days of classes

5cm of learning!

2. Nicole worked 46 hours over the Christmas holidays. Her regular rate of pay is \$17.00 per hour (\$17 / hr). Because it is Christmas, she gets overtime pay of **double** the regular rate of pay after 40 hours in a work week.

a. Determine Nichol's gross pay for those 46 hours.

$$\text{Reg Pay} = \$17/\text{hr} \cdot 40\text{hr} = \$680$$

$$\text{O/T Pay} = \$17/\text{hr} \cdot 2 \cdot 6\text{hr} = \$204$$

b. Nichol has asked her boss to send \$25/ week (each pay) into her personal Registered Retirement Savings Plan (RRSP) at her bank. Any money contributed to the plan is not taxed. Determine her Taxable Income.

$$884 - 25 = \$859 \text{ TAXABLE}$$

c. If Nichol is in a 22% 'tax bracket' (her combined taxes, Federal and Provincial) how much does she pay in income taxes?

$$859 \cdot \frac{22}{100} = 188.98 \text{ TAXES}$$



### 3. Arithmetic.

**Multiply:** Show work (no calculator, you may use times tables for now)

$$27 \times 33 =$$

$$\begin{array}{r} \overset{2}{27} \\ \times 33 \\ \hline 81 \\ + 81\text{--} \\ \hline 891 \end{array}$$

You are allowed  
to use a calculator!  
But knowing how to do  
it this way

$$185 \cdot 44 =$$

$$\begin{array}{r} \overset{32}{185} \\ \times 44 \\ \hline 740 \\ + 740\text{--} \\ \hline 8140 \end{array}$$

is  
handy!!

Subtract: Show work

$$724 - 48$$

$$\begin{array}{r} 6 \overline{) 724} \\ \underline{676} \\ 48 \end{array}$$

← "Six Hundred  
Eleventy Fourteen"  
l.o.l

↑↑ Check ✓  
Adding  
up.



**Bonus(es):** (One bonus mark each question)

**1. Problem Solve:**

The Sum of two numbers is 16

Their difference is 4.

→ Determine the two numbers:

Calculate their Product:

10 and 6

60

Guess & Check

<u>1st #</u>	<u>2nd #</u>	<u>Sum</u>	<u>Diff</u>
<del>9</del>	<del>7</del>	<del>= 16</del>	<del>9 - 7 = 2.</del>

WANT 4

$10 + 6 = 16 \checkmark$

$10 - 6 = 4 \checkmark$

Yeah

$10 \cdot 6 = 60$

2. **Problem Solve.** How many different ways can Christina play each of her three favourite songs once in **some order** on her iPod?

A B C  
A C B  
B A C  
B C A  
C A B  
C B A

6 ways

make a list

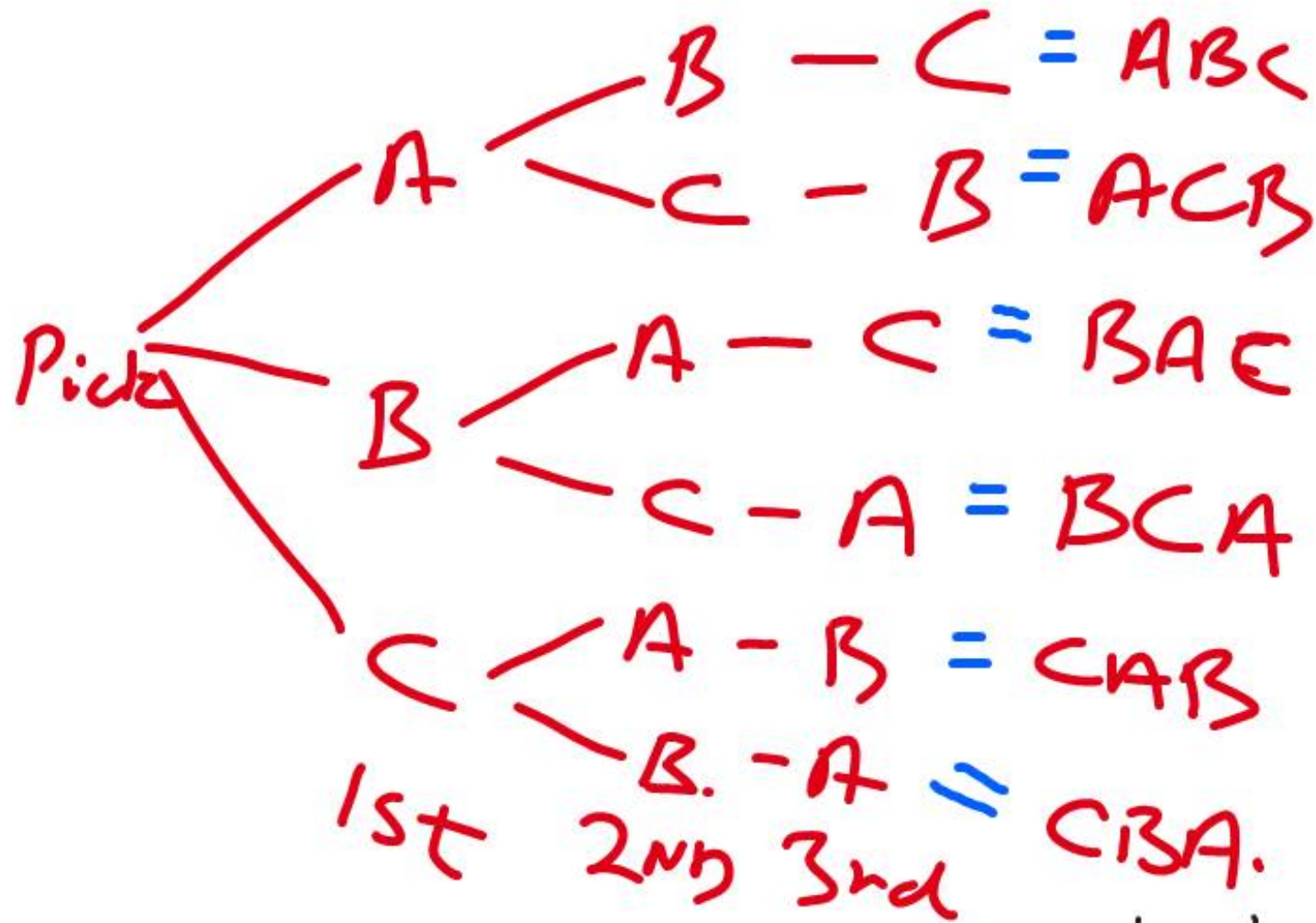
Make a list

$$\frac{3}{\text{Song 1}} \cdot \frac{2}{\text{Song 2}} \cdot \frac{1}{\text{Song 3}} = 6$$

Count choices



make a decision tree



Lots of ways to solve a problem

Thinking starts with !!  
Trying o.



3. Calculate 6.9% of 1200.

$$6.9/100 \cdot 1200$$
$$= 82.8$$

*That was a very quick quiz  
debrief for Week 2.*

*Quiz **EVERY** Thursday → Last chance is  
the Friday*

*Do not miss too many  
quizzes!*



Does everyone have  
their yellowquill.org  
account?