15% Tax

Part A – Multiple Choice

1) Frank runs the 1500 m race in 4 minutes and 40 seconds. If her pace stays the same, how long will it take her to run 5km? Answer rounded to 2 decimal places.
   a) 15.56 min   b) 17.12 min   c) 12.45 min   d) 18.67 min

   $\frac{1.5km}{4.66min} = \frac{5km}{x}$

2) If 30 calculators cost $174.00. How much does 1 calculator cost?
   a) $5.17   b) 9.28   c) $2.90   **d) $5.80**

3) What is the total cost of a cordless drill that is being sold for $110.74 in Wolfville, N.S (15% HST)., plus tax?
   a) $125.14   **b) $127.35**   c) $126.24   d) $94.13

4) Calculate the cost of buying 3 new paperback books for 1/3 off. The regular price of one book is $10.49. *Don't include taxes*.
   a) $15.73   b) $6.99   **c) $20.98**   d) $6.92

   $10.49 \times \frac{2}{3} \times 3$

5) The regular price of honey ham at a grocery deli is $2.39/100g. If the ham is on sale for 25% off, what is the cost of 275g?
   a) $6.16   b) $3.70   c) $6.23   **d) $4.93**

   $\frac{2.39}{100g} \times 0.75 = \frac{1.79}{100g} = \frac{x}{275}$

6) What is the percent mark-up if the wholesale price for a sweater is $15.50 and the retail price is $24.99?
   a) 62%   **b) 61%**   c) 38%   d) 28%

   Mark up $= \frac{24.99-15.50}{15.50}$

Part B:

1) Some computer monitors have an aspect ratio of 4:3. This means that for every 4 inches of width, the monitor is 3 inches high. Calculate the width of a monitor that is 24 inches high.

   $\frac{4w}{3H} = \frac{x}{24}$ $\frac{3x}{3} = \frac{96}{3}$ **X = 32 in**

2) If a pizza vendor decides to increase his price/slice by 35%, what will his new price be if he now charges $3.50/slice?

   $3.50 \times 1.35 = \$4.73/slice$

3) It costs $2.80 for a dozen eggs. Write as a unit rate.

   $\frac{\$2.80}{12\ eggs} = \$0.23/egg$

4) A cement masonry apprentice earns $375.00 for 16 hours worked. Write this as a unit rate.

   $\$375/16hr = \$23.44/hr$

5) One type of fabric costs $26.34 for 3 m of fabric and another one costs $42.25 for 5 m of fabric. Which fabric has the lower cost per metre?

   $\$26.34/3m = \$8.78/m$ $\$42.25/5m = \$8.45/m$ — this one is lower

6) The price of a new 3D TV is $2889.00. Calculate the cost of the TV purchase in Summerside PEI (14% HST) including tax.

$2889 \times 1.15 = \$3293.46$
3322.35
15%

7) How many Japanese Yen can you buy with $525?

Selling

$\$525 \times \dfrac{1 \text{ yen}}{0.00985 \text{ CAD}}$

$\boxed{53272.45}$

8) How many Canadian dollars will you receive if you sell the bank 55 N. Ireland pounds?

Buying

$55 \text{ pounds} \times \dfrac{1.996146 \text{ CAD}}{1 \text{ pounds}}$

$\boxed{109.79}$

Part C: Show all your work.

1) Three grocery stores have advertised their price for packages of pork chops:

Store A	$3.25/500g	$0.0065/g
Store B	$5.85/Kg	$0.0058/g
Store C	$11.38/2 kg	$0.0057/g

a) What is the unit price of pork chops at each store, per gram? Give your answer to 4 decimal places.
b) What is the cheapest way to purchase 3.5 kg without any wasted meat? How much is it? — 3.25
5.85
1 pack from each store
11.38
$\boxed{20.48}$

2) Janice sells sports equipment in Nfld (13% HST). She is offering a sale of 40% off all items in the store. Helmets regularly sell for $19.99 each, 3 tennis balls for $2.39, and basketballs for $34.99 each. How much will it cost to buy 4 helmets, 9 tennis balls, and 5 basketballs? Include tax.

$19.99 \times 4 = 79.96$
$2.39 \times 3 = 7.17$
$34.99 \times 5 = 174.95$
$262.08 \times 0.6 = \$157.25$
$\times 1.15$
$= \$180.84$

3) A restaurant buys a 4 lb jar of peanut butter for $10.99.

a) The restaurant bought $43.96 worth of peanut butter. How many pounds of peanut butter were purchased?   4 jars × 4 lbs = 16 lbs.
b) How much would it cost the restaurant to buy 30 lb of peanut butter?
Needs 8 jars = 87.92.

4) During a Boxing Day promotion in Saint John, **NB**, Krazy Krazy Televisions advertises a 42" flat-screen television for $300.00 off and they will "pay the HST", while Too Good To Be True Electronics is discounting the same television by 30%. If the original price of the television at both stores is $1299.99, which store offers a better deal?

1299.99
$- 300.00$
799.99

$1299.99 \times 0.70 = 909.99$
$\times 1.15 = \$1046.49$

5) Quinn travelled to Milan for a weekend to purchase fabric for her children's clothing business. She bought 15 metres of hand-painted designer cotton for €28.92/m and 40 metres of reversible fleece for €9.95/m. How much did her fabric cost in total in Canadian dollars?

$28.92 \times 15 = 433.80$
$9.95 \times 40 = 398.00$
€831.80 convert to CAD.
$831.80 \times \dfrac{1.644814}{1 €} = \$1368.16$ CDN