Worksheet on Fractions, Percentages, Decimals, Ratios, Exchange Rates

1. (a) Calculate the exact value of:

   $2.3^2 - \sqrt{3.4969}$

   (b) Using a calculator or otherwise, calculate the value of

   1 3.84 – 1.03   x   6.22

2. Sweet n Sour tomato paste sells in two bottle sizes as shown below:

Bottle Size	Cost
265 ml	$8.33
755 ml	$19.20

   Which bottle size is the better buy? Give a reason for your answer.

3. Zoxo blocks are made with buckets of gravel, sand and cement mixed in the ratio 5:3:2.
   (i)   If 15 buckets of sand are used in a mixture, how many buckets of cement are needed?
   (ii)   If a mixture with 30 buckets of gravel can produce 150 blocks, how many blocks can be produced using a mixture of 45 buckets of sand?

4. Calculate the value of $11.7 - 2.45 \times 3.84 \div 1.5$, stating your answer:

   (i)   Exactly;
   (ii)   correct to one decimal place;
   (iii) correct to three significant figures;

   in scientific notation

5. Nadine's Travel Agency advertised the following vacation package to Grenada in the daily newspapers.

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Nadine's Travel Agency

Grenada Vacation Dream Package

Air Fare                          US$356

Hotel Accommodation        US$54 per
night

Exchange Rate:  US$1.00 = EC $2.75.
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(i)   Calculate the cost of the air fare in EC$.

(ii)   Madge saved EC$ 6 000. How many nights can Madge if she plans to use all of her savings on this dream vacation package.

6. In a bank US$345 can be exchanged for BD$600. Find:

(i) How many BD$ can be exchanged for $1?

(ii) How many US$ is equivalent to BD$610?

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