# CHAPTER 1 TEST REVIEW Solutions

1. When he works as a landscape gardener, Mark sometimes uses a powdered fertilizer. It must be mixed at a rate of 1 part of powder to 14 parts of water. How much water will Mark use for 3 litres of powder? **(42 litres)**

2. A car uses 5.5 litres of gas when it travels 100 km.

   a) Express this as a rate of fuel consumption. **(5.5 L/100km  or  1.1L/20 km)**

   b) How much fuel would be needed for a 400-km trip? **(22 Litres)**

3. Loretta works as a surveyor near Burwash Landing, YT. Her map uses a scale of 2.5 cm:100 km. On her map, two sites she must visit are 7.4 cm apart. What is the actual distance between the two sites? **(296 km)**

4. If a package of 12 pens cost $38.98, what is the cost of 1 pen? **($3.25)**

5. If the wholesale price of 10 packages of smoked salmon is $99.50, what will the cost be for one package after a markup of 45%? **($14.43)**

6. The bakery in Lund, BC is selling day-old buns at a 40% reduction. If the regular price is $4.79/doz, what is the reduced price? **($2.87)**

7. A sofa in a furniture store was originally $1899.00. The price was "reduced by 35% for quick sale." When it did not sell, the manager offered another reduction of 20%.

   a) What was the final price of the sofa with 5% GST and 7% PST? **(987.48 x 1.12 = $1105.98)**

   b) Is this the same as a 55% reduction? Show why or why not.

   **(55% reduction = 854.55 x 1.12= $957.10. 55% is off original price where 20% is off lower price so less of a discount)**

8. A furniture store in The Pas, Manitoba, advertises: "All weekend, no GST and no PST." If GST and PST are usually 5% each, what is the actual saving as a percent on an item that costs $24.97? **($2.50)**

9. After prime planting season was over, a horticulturist sold lilac bushes for $15.00. If the original price was $39.00, what is the percentage markdown? **(61.5%)**

10. Non-profit agencies get a 12% reduction from Polly's Printers. How much will they save on a printing job that regularly costs $865.00? **($761.20)**

11. James works for an industrial lighting company. He travels to Hong Kong to attend a trade show. James sees a fluorescent track lighting unit priced at 1295.31 Hong Kong dollars. What is the cost in Canadian dollars if $1.00 CAD is worth 7.3181 Hong Kong dollars? **($177)**

12. Marian travels to Spain to visit her mother and father.

   a) $1.00 CAD is worth €0.680228. If Marian converts $450.00 CAD into euros, how many euros does she receive? **($306.10)**

   b) During her visit, Marian buys a leather purse for €125.00. What is the cost in Canadian dollars? **($163.76)**