Section 1.3 Setting a Price, Build Your Skills, p43–44
Student Resource p32–33

Build Your New Skills

These solutions were worked out using the tax rates in effect at the time of publication and are included on p. 29 of the student book.

1. As a percentage, the regular price plus the markup is 100% plus 60%, which equals 160%.
1.60 × $22.75 = $36.40 a shirt

2. $49.95 + (2 × $129.95) = $309.85
HST is 13%.
$\dfrac{13}{100} = 0.13$
0.13 × $309.85 = $40.28
The total HST paid on the items is $40.28.
$309.85 + $40.28 = $350.13
The total cost of the items, including tax, is $350.13.

3. $49.95 + $129.95 = $179.90
As a percentage, the St. John's price plus the markup is 100% plus 10%, which equals 110%.
$179.90 × 1.10 = $197.89
As a percentage, the PEI price with PST and GST is 100% plus 5% GST plus 10% PST, or 115%.
$197.89 × 1.15 = $227.57
You would pay $227.57 for a hard hat and a pair of steel-toed boots in PEI.

4. As a percentage, the regular price plus the markup is 100% plus 25%, or 125%.
The sink:
$89.95 × 1.25 = $112.44
The bathtub:
$639.95 × 1.25 = $799.94
2 faucets:
2 × $74.95 = $149.90
$149.90 × 1.25 = $187.38
Add to find the total she charged her customer, excluding tax.
$112.44 + $799.94 + $187.38 = $1099.76

5. a) 50 × $3.50 = $175.00
175 × $3.99 = $698.25
250 × $2.00 = $500.00
$175.00 + $698.25 + $500.00 = $1373.25
Her total income is $1373.25.
b) 100 × $3.50 = $350.00
100 × $2.00 = $200.00
She receives $150.00 more income if she sells 100 quarts directly from her farm. Students may suggest that she would sell to a wholesaler because she may receive large orders from

wholesalers or she may not be able to sell all her crop directly or at the farmers' market.

6. a) $\$2.50 \times 1.15 = \$2.88$
The new unit price would be $2.88.
b) First, find the difference in price per person.
$\$2.88 - \$2.50 = \$0.38$
Then, find the difference for 100 people.
$\$0.38 \times 100 = \$38.00$
She would make $38.00.
c) Student answers will vary but should show they have considered various options such as trying to source less expensive ingredients and supplies; making her portions per person smaller; or trying to find ways she can be more efficient with her time, including perhaps hiring a delivery person.

7. Answers will vary but students may suggest discounts of as much as 50%, since that is a fairly common discount for out-of-season items. Students should recognize that Marie's profits will be lower, but that some revenue is better than no revenue on those items. Marie's reasoning would be that she has paid for these items and that it's best if she tries to recover some of the money she spent.

Extend Your Thinking

8. First, convert kilograms to grams.
$10 \text{ kg} \times 1000 = 10\ 000 \text{ g}$
Find the unit price per gram.
$$\frac{\$175.00}{10\ 000 \text{ g}} = \$0.0175/\text{g}$$
Calculate the price for 250 g.
$250 \text{ g} \times \$0.0175 = \$4.38$
a) Student answers will vary but they should consider overhead costs such as the rent and utilities for the store; equipment costs such as a display fridge for the cheese and knives or other tools; materials for displaying, storing, and packaging the cheese such as plastic wrap; and staff time for stocking, cutting, and serving the cheese.
b) $\$4.38 \times 1.40 = \$6.13$
It would cost $6.13 for 250 grams.
c) Since the customer is getting a discount of 15%, they are paying 85% of the original price $(100\% - 15\%)$.
$\$6.13 \times 0.85 = \$5.21$
The price would be $5.21.
d) Yes, you would still be making a gross profit.
$\$5.21 - \$4.38 = \$0.83$
But you would also need to consider whether this smaller margin would cover your additional costs, as discussed in a).