

Ch1 Practice Test

Multiple Choice

Identify the choice that best completes the statement or answers the question.

d 1. A 2-stroke dirt bike requires 15 L of gas to be mixed with 4 L of oil. How much oil do you need to fill up your dirt bike if you use 24 L of gas?

- a. 90 L of oil
- b. 7.68 L of oil
- c. 2.5 L of oil
- d. 6.4 L of oil

$$\begin{array}{l} \text{Gas} \\ \text{Oil} \end{array} \frac{15}{4} = \frac{24}{x} \quad x = 6.4$$

d or a 2. If 5 cm on a map represents 5 km of actual ground, how many centimetres would 25 km of actual ground be on the map?

- a. 25 cm
- b. 20 cm
- c. 1 cm
- d. 25 cm

$$\begin{array}{l} \text{cm} \\ \text{km} \end{array} \frac{5}{5} = \frac{x}{25} \quad x = 25$$

a 3. If 3 kg of tomatoes costs \$10.20, how much will you pay for 8 kg?

- a. \$27.20
- b. \$32.64
- c. \$21.76
- d. \$27.70

$$\frac{\$ 10.20}{\text{kg } 3} = \frac{x}{8} \quad x = 27.2$$

a 4. A video game costs \$48.99. What is the total price when you add 12% HST?

- a. \$54.87
- b. \$51.44
- c. \$52.42
- d. \$5.88

$$48.99 \times 1.12 = \$54.87$$

a 5. Iona buys a new home gym for \$2075.00. Calculate the PST and GST if she lives in Saskatchewan.

Tax Rates		
	PST	GST
Alberta	0%	5%
British Columbia	HST 12%	
Manitoba	7%	5%
Northwest Territories	0%	5%
Nunavut	0%	5%
Saskatchewan	<u>5%</u>	<u>5%</u>
Yukon	0%	5%

$$2075 \times 0.05 = \$103.75$$

- a. \$103.75 GST, \$103.75 PST
- b. \$145.25 GST, \$103.75 PST
- c. \$103.75 GST, \$145.25 PST
- d. \$103.75 GST, \$0.00 PST

c 6. Glenda makes and sells jewellery. If it costs her \$16.00 to make a necklace and she marks up the price by 160%, for how much will she sell the necklace?

- a. \$49.92
- b. \$33.28
- c. \$41.60
- d. \$62.40

$$\$ 16.00 \times 1.60 = 25.60$$

$$\begin{array}{r} 16.00 \\ + 25.60 \\ \hline 41.60 \end{array}$$

3. Raul is buying chicken wire that he will use to reinforce concrete in a retaining wall. He can buy a 25-ft roll for \$17.72, a 50-ft roll for \$39.25, or a 100-ft roll for \$72.70. Which is the best buy?

$17.72 \div 25 = \$0.71/\text{ft}$
 $39.25 \div 50 = \$0.79/\text{ft}$
 $72.70 \div 100 = \$0.73/\text{ft}$

Best Buy

4. The cost of purchasing bathtubs at a wholesaler depends on the number you buy.

If you buy fewer than 5 bathtubs, they cost the regular price of \$399.99.

If you buy 6 to 10 bathtubs, you get a discount of 7%.

If you buy 11 to 20 bathtubs, you get a discount of 16%.

Calculate how much it would cost to buy 16 bathtubs in Alberta, where 5% GST is applied.

$\$399.99 \times 16 = \6399.84
 $6399.84 \times 0.16 = \$1023.97$
 $6399.84 - 1023.97 = \$5375.87$
 $\$5375.87 \times 0.05 = \268.79

5375.87
 $+ 268.79$
 \hline
 5644.66

Problem

1. Lawrence is a nurse. He needs to measure and administer the correct dose of medicine to his patients. 125 mg of ~~medicine~~ ^{powder} must be dissolved into 300 mL of water. If the patient requires a dose of ~~500 mg~~ ^{total} of medicine, how much water is needed? Round to the nearest millilitre.

$\frac{300}{425} = \frac{x}{800}$
 $x = 564.7 \text{ mL H}_2\text{O}$
565 mL

2. A store sells 25 board games for \$53.95 each.

- a) How much more money would the store make if it sold the same number of board games for \$58.95 each? $\frac{1}{2}$
- b) What would be the percent increase in price? $\frac{1}{2}$
- c) Why might the store not want to increase the price of its board games? omit

a. $58.95 - 53.95 = 5.00/\text{game}$
 $5 \times 25 = 125\#$

b. $\frac{5.00}{53.95} = 0.093 = 9.3\%$
 $\times 100$

c. rather sell more games

Question like this on test.

Item	Wholesale Price	Retail Price	Markup	Cost 12%
1.	\$ 9.85	\$ 15.96	62%	17.88
2.	20.12	37.02	84%	41.46
3.	61.15	81.94	34%	91.72

$$1. 9.85 \times 0.62 = 6.11$$

$$\begin{array}{r} 9.85 \\ + 6.11 \\ \hline \$ 15.96 \end{array}$$

$$2. 20.12 \times 0.84$$

$$\begin{array}{r} 37.02 \div 1.84 \\ = 20.12 \end{array}$$

$$37.02 \times 1.12 = 41.46$$

$$3. 81.94 \div 1.34$$

$$= 61.15$$