

## What's Going On?

**Checking In**

**Minds on**

Percent Basics

**Action!**

Boxing Day Sales!

**Consolidation**

6MC and 6OR

**Learning Goal - I will be able to problem solve with ratios and percentages.**

50% of 600

$$\frac{600}{2} = 300 \quad \checkmark$$

$$600 \times 0.50$$

30% of 100  
30

30% of 1500.

$$1500 \times 0.30 \\ = 450$$

13% of 575

$$\begin{aligned} 575 \times 0.13 \\ = 74.75 \end{aligned}$$

7% of 129

$$129 \times 0.07$$

$$= 9.03$$

4.5% of 655

$$655 \times 0.045$$

76.3% of 1237

$$\begin{aligned} 1237 \times 0.763 \\ = 943.631 \end{aligned}$$



After Tax?\*

\* 13%

\$1.00

After Tax

\$150

$$150 \times 1.13 =$$

$$150 \times 0.13 = \frac{X}{\quad}$$

$$\text{Total} = 150 + X$$

After Tax

$$\begin{aligned} \text{Total} &= 1 \text{ Original} + 13\% \text{ of original} \\ &= 1 \text{ original} + 0.13 \times \text{original} \\ &= 1.13 \times \text{original} \end{aligned}$$

\$575.60

after tax:

$$575.60 \times 1.13 \\ = 650.43$$

After tax something cost \$  
\$226.00

What was the original price?

\$200.00

After tax something costs  
\$1353.65

What was the original price?

$$1353.65 \div 1.13 \\ = 1197.92$$

**Action!****Boxing Day Sales!**

Over the break, Joanna and I bought a new duvet cover.

The list price was \$199.99 but it was on sale for 30% off.

$$199.99 \times 0.3 = 60$$

$$199.99 - 60 = 139.99$$

$$199.99 \times 0.7 = 139.99$$

Because it was boxing day, everything in the store was an additional 20% off the sale price.

$$139.99 \times 0.2 = 28$$

$$139.99 - 28 = 111.99$$

$$139.99 \times 0.8 = 111.99$$

How much did we pay, after taxes, for the duvet cover?

$$111.99 \times 1.13 = 126.55$$

## Consolidation

### Let the Culminating Begin!

Today we start our course culminating activity.

Your combined efforts over the next two weeks will account for 5% of your final mark.

Each day / two days we will focus on a particular part of the course.

Each day, you will have multiple choice and open response questions to complete and hand in the next day to be marked.

The questions will be returned and a follow-up activity will be applied to each part.



**Consolidation**

**6MC**

1 What is the value of the expression

$$\frac{5(-18 + 12)}{-4 + 1}?$$

a 10

b 6

c -6

d -10

- 2 Alfredo and his wife, Jody, work in a restaurant.

Last week Alfredo received an average of \$15 in tips for each of the 55 tables he served. Jody received an average of \$20 in tips for each of the 60 tables she served.

They are planning a weekend trip. Alfredo will pay a total of \$220 for their hotel room and Jody will pay a total of \$160 for their rental car.

How much of their combined tips will be left over after they have paid for their hotel room and rental car?

- a \$1620
- b \$1645
- c \$2025
- d \$2405

- 3 A basketball player scores 28 points in a game. She scores 35% of the total team points.

How many points does her team score in total?

- a 63
- b 65
- c 72
- d 80

- 4 Josie works in a sports store. She receives 8% of the total sales each day. One day, she receives \$35 for her portion of the total sales. What are the total sales for that day?
- a \$37.80
  - b \$43.75
  - c \$280.00
  - d \$437.50

- 5 Nate buys a video-game system.
- The system costs \$300.
  - Games cost \$60 each.
  - He pays 13% tax on the system and on each game.
  - He has \$850 in total to spend.

After he pays for the system, how many games is Nate able to buy?

- a exactly 12
- b exactly 9
- c no more than 7
- d no more than 3

- 6 Mario is making fruit punch by mixing orange juice and pineapple juice in a ratio of 1:3.

How much pineapple juice should he use to make 3 L of fruit punch?

- a 0.75 L
- b 2 L
- c 2.25 L
- d 4 L

**Consolidation**

**6OR**



### **CD Sell-Off**

Juan belongs to a CD club that sells CDs for \$11.44 each before tax. His first shipment of CDs costs \$90.49 including 13% tax.

How many CDs are in his first shipment?

Show your work.

### **Part-Time Job**

Ezre works part-time at a clothing store. He earns \$80 per week plus 6% of the value of his weekly sales.

This week Ezre earns \$119.

What is the total value of his sales this week?

Show your work.

## Competing Sales

Sam is interested in buying a TV. At Fair Deal, the TV is regularly priced at \$599.99 and is on sale for 20% off the regular price. At Big Big Discount, the same TV is regularly priced at \$899.99 and is on sale for 30% off the regular price.



What is the difference in the sale price of the TV between these two stores?

Show your work.

## What a Bargain!

Susan buys a tennis racket from a store.

- The tennis racket's original price is \$75.
- All tennis rackets are on sale for 25% off the original price.
- The tennis racket has a scratch, so she receives an additional 10% off the sale price.

How much does Susan pay for her tennis racket, including 13% tax?

Show your work.

**Keepin' Tabs**

A student council collects aluminum pop tabs to raise money to purchase a wheelchair. A company buys the pop tabs for \$0.88 per kilogram.

If 1267 pop tabs have a mass of one pound, how many pop tabs are needed to purchase a wheelchair worth \$1500?

Show your work.

**Hint:**

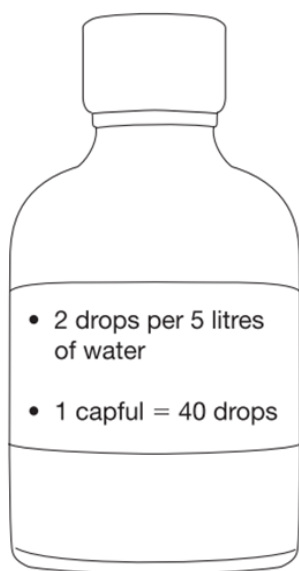
1 kilogram = 2.2 pounds

## Healthy Fish

James adds vitamin drops to his fish tank to keep his fish healthy.

If James follows the instructions on the bottle of vitamins, how many capfuls should he add to his 350-litre fish tank?

Show your work.



1D 8.1 (Ratio and Percent) - How To.pdf