Unit 3 – Finance
3.0C – Application of Percents - Discounts

- the **_discount_** is the amount by which a price is reduced
- it is often stated as a fraction or a percent of the price
  e.g. "1/2 off" or "reduced by 60%"
- we can calculate the discount on an item by using the following proportion

$$\frac{\text{Percent Discount}}{100} = \frac{\text{Discount (\$)}}{\text{Regular Price}}$$

- we can determine the **_sale price_** of an item by subtracting the discount from the regular price

Sale price = Regular price − Discount($)

B. Examples

1. Find the amount of the **discount** in $.
   a) 15% discount on a $25 shirt

   b) 50% discount on a $77.98 pair of pants

2. Find the **regular** price.
   a) a 20% discount of $8.75

   b) a 30% discount of $12.50

3. Find the **percent** discount.
   a) $9 discount on a $28 hat

   b) $4.36 discount on a $18.50 shirt

$$\frac{\text{Percent Discount}}{100} = \frac{\text{Discount (\$)}}{\text{Regular Price}}$$

Sale price = Regular price − Discount($)

4. Find the **<u>discount</u>** in $ and the **<u>sale</u>** price.

   a) regular price $32.50, discount 15%

   b) regular price $24.98, discount 25%

5. A 40% discount on ski equipment is $128.

   a) Find the regular price.

   b) Find the sale price.

6. A regular price of $65 is discounted $20.

   a) Find the sale price.

   b) Find the percent discount.

7. An item with a regular price of $44.99 is discounted 35%.

   a) Find the dollar value of the discount.

   b) Find the sale price.

Assignment – Show all work on a separate sheet of paper!

Remember to use the following proportion:

$$\frac{\text{Percent Discount}}{100} = \frac{\text{Discount (\$)}}{\text{Regular Price}}$$

1. Calculate the amount of the **<u>discount</u>** and the **<u>sale price</u>** of the following items.

   a) skates – regular price $89.99, discount 18%.

   b) bicycle – regular price $142.98, discount 25%.

   c) stereo – regular price $246.59, discount 10.5%.

2. A store gives a 30% discount on equipment purchased by a hockey team. Calculate the cost to outfit **20** players.

   shoulder pads - $47   skates - $155   helmet - $50   jersey - $38
   shin guards - $44   elbow pads - $30   gloves - $75   stick - $48

3. Lucia receives a 15% discount on her purchases at Hartley's Sports Store. What is the **<u>regular price</u>** of each item?

   a) running shoes, discount $4.50

   b) track suit, discount $8.22

   c) ski jacket, discount $22.53

4. Calculate the **<u>regular price</u>** and the **<u>sale price</u>**.

   a) 20% discount is $140

   b) 35% discount is $120

   c) 18% discount is $9

5. Calculate the **<u>percentage discount</u>** on each item (to the nearest percent) and the **<u>sale price</u>**.

   a) regular price $160, discount $12

   b) regular price $23.98, discount $2.48

   c) regular price $354.98, discount $15.62