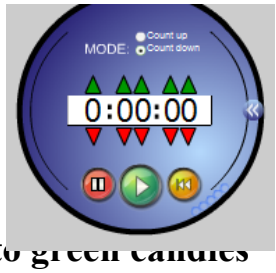
How are you doing?

# Warm Up Questions




1. **In a bag of red and green candies, the ratio of red candies to green candies is 3:4. If the bag contains 126 candies, how many red candies are there?**

2. **Clothing store A sells T-shirts in only three colors: red, blue and green. The colors are in the ratio of 3 to 4 to 5. If the store has 20 blue T-shirts, how many T-shirts does it have altogether?**

3. **A supermarket is selling crackers for $2.50 for an 8 oz box and $3.00 for a 12 oz box. What is the unit price for each box and which is the better buy?**

4. **A furniture store in Halifax NS (15%), is selling a bedroom suite. The furniture store paid $800.00 for the suite, but intends to add a markup of 75%.**
   a) **What will the furniture store charge for the suite?**
   b) **How much will the customer have to pay with tax?**
   c) **What would be the difference in price if the same set was sold in PEI for the same price?**

1. **In a bag of red and green candies, the ratio of red candies to green candies is 3:4. If the bag contains 126 candies, how many red candies are there?**

**Red = 3**
**Green = 4**
**Total = 7**

**Total Ratio**

**Let x = Red Candies**

**Red Candies**
**Total**

$$\frac{3}{7} = \frac{x}{126}$$

→ **7x = 378**
→ **x = 54 Red Candies**

2. **Clothing store A sells T-shirts in only three colors: red, blue and green. The colors are in the ratio of 3 to 4 to 5. If the store has 20 blue T-shirts, how many T-shirts does it have altogether?**

**x 20**

**Red = 3**
**Blue = 4**
**Green = 5**

**Total = 12**

**Total Ratio**

**Let x = # of Shirts**

**Blue Shirts**
**Total**

$$\frac{4}{12} = \frac{20}{x}$$

→ $4x = 240$
→ $x = 60$ **Shirts in all**

2. **Clothing store A sells T-shirts in only three colors: red, blue and green. The colors are in the ratio of 3 to 4 to 5. If the store has 20 blue T-shirts, how many T-shirts does it have altogether?**

**Red : Blue : Green**
**3 : 4 : 5**

$$\frac{\text{Blue Shirts}}{\text{Red Shirts}} = \frac{4}{3}$$

**Let x = # of Shirts**

$$\frac{4}{3} = \frac{20}{x}$$

$$4x = 60$$

$$x = 15$$

$$\frac{\text{Blue Shirts}}{\text{Green Shirts}}$$

**Let x = # of Shirts**

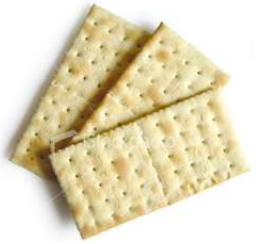
$$\frac{4}{5} = \frac{20}{x}$$

$$4x = 100$$

$$x = 25$$

There are 20 blue, 15 red and 25 green T-shirts for a total of 60 shirts. :)

3. **A supermarket is selling crackers for $2.50 for an 8 oz box and $3.00 for a 12 oz box. What is the unit price for each box and which is the better buy?**



**Price**
**Unit**


**$2.50**
**8oz**

**=$0.31/oz**

**$3.00**
**12oz**

**=$0.25/oz**

→ **The 12 oz box is the better buy!**

4. **A furniture store in Halifax NS (15% tax), is selling a bedroom suite. The furniture store paid $800.00 for the suite, but intends to add a markup of 75%.**
   a) **What will the furniture store charge for the suite?**
   b) **How much will the customer have to pay with tax?**
   c) **What would be the difference in price if the same set was sold in PEI for the same price?**

**a) $800.00 x 1.75 = $1400.00**

**b) $1400.00 x 1.15 = $1610.00**

**c) $1400.00 x 1.05 = $1470.00**
**$1470.00 x 1.10 = $1617.00**

➡ **Difference in price: 1610 - 1617 = $7.00**