A Motorcycle Transaction





Myles had been saving his money for over a year, and was finally able to buy two motorcycles. When his mother found out, however, she made him sell both of the motorcycles.

He sold each motorcycle for $600.

He lost 20% on the more expensive motorcycle.

He made a profit of 20% on the other motorcycle.

**Answer the following questions:**

**1) Did he make a profit or a loss on the entire transaction?**

**2) How much money did he make or lose?**

**3) What was the percent of change (profit or loss) on the entire transaction?**

**Solutions:**

**Myles lost 20% on the expensive motorcycle, which means that he got 80% of the original cost back.**

**So… 80% of what number is 600**

**0.8x = 600**

**x = 750**

**Myles made 20% on the other motorcycle, which means that he got 120% of the original cost back.**

**So… 120% of what number is 600**

**1.2y = 600**

**y = 500**

**Myles PAID a total of $500 + $700 for the two motorcycles, or $1250.**

**Myles RECEIVED a total of $600 + $600 when he sold them, or $1200.**

**Therefore, he LOST $50, overall.**

**The percent of change is:**

**Amount of change 50**

**Original Amount 1250**

**0.04**

**4% loss overall**