

Example 1: Maria's Hat Business

Maria runs a business selling knitted hats. She can make two hats from one ball of yarn. She's bought five balls of yarn. Each ball of yarn costs \$5.

What does this tell us?

- 5 balls of yarn at \$5 each cost \$25 ($\$5 \times 5$). These are Maria's total business expenditures for her current batch of hats.
- Maria has enough material to make 10 hats (2 hats per ball of yarn \times 5 balls of yarn).

If we divide her expenditures (\$25) by the number of hats she makes (10), then we learn that it costs \$2.50 worth of materials to make each hat. Once we know what it costs to make each hat, we can set the price higher than that to create a profit.

Solution: Maria decides to charge \$20 per hat she makes, earning \$200 when she sells all 10 hats ($\$20 \times 10$ hats = \$200). If you subtract her business expenses (\$25), you'll see she makes a profit of \$175 for those hats.

Maria decides to divide her profit three ways. She puts \$90 in her savings account, she keeps \$45 to spend, and she uses \$40 to buy more yarn to keep her business running.

Example 2: Louie's Lawn Service

Louie cuts the grass for his neighbors. He uses his dad's lawn mower for free, but he has to pay for gas to power it. It costs \$4 to fill the mower's gas tank, and Louie can cut 4 yards before he has to refill the mower. He currently has 8 customers.

What does this tell us?

- Louie has to fill up the lawn mower with gas twice to cut all 8 yards.
- It costs Louie \$4 each time he fills up.
- Louie's total business expenditures are \$8 ($\4 per tank of gas \times 2 times he fills up).

If we divide his expenditures (\$8) by the number of yards he mows (8), we learn that it costs \$1 to cut each yard. Now that we know what it costs to mow each yard, we can set a price to create a profit.

Solution: Louie decides to charge each neighbor \$15 to cut their grass. He earns \$120 for cutting the grass for all his customers ($\$15 \times 8$ yards). If we subtract his business expenses (\$8), we find he makes a profit of \$112.

Like Maria, Louis decided to save some money, spend some money, and reinvest some money in his business. He decides to use \$20 to buy gas next time so he can find new customers and mow even more yards. This will help him grow his business.