Situation:

You are taking a taxi in Gotham City. The taxi fare in Gotham City is $2.50 for each mile driven. You also plan to give the driver a $5 tip. How many miles can you take a taxi if you have $25?



**Step 1: What information is given in the situation?**

$2.50 each mile driven

$5 tip

$25 total

**Step2: Identify your unknown (what do you want to find?).**

In mathematics we call this unknown the **independent variable**.

It doesn’t depend on any other numbers, and is what you need to find in order to answer your question.

x =

**Step 3: Piecing it together as an equation.**

**Step 4: Evaluate your equation. Does your answer make sense?**

You can ride 8 miles in the taxi.

Examples

1) An amusement park charges $1.50 per ride and an additional $10 to get in to the park. If you spent $22 at the amusement part, write and solve an equation that will determine how many rides you went on.



**Step 1: What information is given in the situation?**

**Step2: Identify your unknown (what do you want to find?).**

**Step 3: Piecing it together.**

**Step 4: Evaluate your equation. Does your answer make sense?**

2) The ages of three sisters are consecutive integers. The sum of their ages is 45. Calculate their ages.

**Step 1: What information is given in the situation?**

\*Consecutive Integers (1, 2, 3)

\*Sum =

**Step2: Identify your unknown (what do you want to find?).**

**Step 3: Piecing it together.**

**Step 4: Evaluate your equation. Does your answer make sense?**

**Video 2**

**Example #1**

1. **Aris buys some scarves that cost $5 each and 2 purses that cost $12 each. The cost of Aris’s total purchase is $39.**

**Write the equation to represent the situation. How many scarves did Aris buy?**

**Variable: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Example #2**

1. **Amber buys 3 bracelets and 3 necklaces. Each bracelet costs $5. Amber pays the clerk $40 and gets $4 change.**

**Write the equation to represent the situation. How much did each necklace cost?**

**Variable: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Example #3**

1. **Jerry exercised the same amount of time each day for 5 days last week.** 
   * **His exercise included walking and swimming**
   * **Each day he exercised, he walked for 10 minutes.**
   * **He exercised for a total of 255 minutes last week.**

**Write the equation to represent the situation. What is the number of minutes Jerry swam each of the 5 days last week?**

**Variable: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**