
Day 3 – Creating Equations

EXAMPLE: John is on vacation and forgot his video camera. He found a camera shop that rents the cameras. They charge a one-time cleaning fee of \$45 and the per day rental charge is \$23. If his final bill is \$229, how many days did John rent the video camera? Write and solve an equation for John's camera rental.

Equation:

$23x + 45 = 229$ where x is the number of days the video camera was rented.

$$\begin{array}{r} 23x + 45 = 229 \\ \quad \underline{-45 \quad -45} \\ 23x = 184 \\ \div 23 \quad \div 23 \\ x = 8 \text{ days} \end{array}$$

1. Each of Miss Smith's students uses a certain number of pencils per week of school. There are 22 students in Miss Smith's class. If there are 36 weeks of school and Miss Smith's students use 3168 pencils in a school year, how many pencils does each student use per week? Write and solve an equation for this situation.
2. Jim has \$50 to spend at the fair. If it costs \$5 for admission and \$2.50 per ride, how many rides can Jim ride at the fair? Write and solve an equation for this situation.
3. Jill is baking cookies for a bake sale. She needs a total of 126 cookies for the bake sale. She has already baked 4 dozen cookies. How many more cookies does she need to bake to meet her goal? Write and solve an equation for this situation.

Day 3 – Independent Practice Problems

Level 1 & 2

1. How many video games can you buy with \$162 if one game costs \$18?

2. Judy has 15 books in her library. She bought several books at a thrift store on Saturday. She now has 84 books in her library. How many books did she buy at the thrift store?

Level 3 & 4

1. A shop rents bikes for \$12 per day plus \$9 per hour. If Tony rented a bike and the total bill was \$75, how many hours did Tony rent the bike?

2. Joey had \$254 to spend at the video game store. He was able to buy 9 video games and had \$29 left. How much did each game cost?