

## Lesson: Multiplication & Division

**Third Grade Objective 1.03:** Develop fluency with multiplication 1 x 1 through 12 x 12 and division up to two-digit by one digit.

### Lesson

Division is finding out how many items (people, candy, toys, etc.) can go into equal sized groups and then how many (if any) are leftover. You can use your knowledge of multiplication to help you solve division problems.

Let's look at this problem:

*David has three times as many jellybeans as Claire. If David has 39 jellybeans, how many jellybeans does Claire have?*

- Let's assign letter D to David and the letter C to Claire.
- Our number sentence can be  $C \times 3 = D$ . We know that David has 39 jellybeans, so  $C \times 3 = 39$ . If Claire's value times three is 39, then 39 divided by 3 is the same as Claire's value.  $39 \div 3 = C$ .  $39 \div 3 = 13$  so Claire has 13 jellybeans.

Here's another problem:

*Nicholas runs 40 yards during the track meet. This is five times as far as Jack runs. How many yards does Jack run?*

- Let's assign letter N to Nicholas and letter J to Jack.
- Our number sentence can be  $J \times 5 = N$ . We know that Nicholas runs 40 yards, so  $J \times 5 = 40$ .  $40 \div 5 = J$  so Jack runs 8 yards.

[www.multiplication.com](http://www.multiplication.com) has tons of great multiplication games, activities and resources! These sites have division practice:

<http://www.coolmath4kids.com/long-division/number-monster-division.htm>

<http://www.gamequarium.com/division.html>

<http://www.aplusmath.com/games/matho/DivMatho.html>

### Now try these

1. Sarah has \$48 in her piggy bank. Sarah wants to add to her jump rope collection. Each jump rope costs \$8. How many jump ropes can Sarah buy? Show your work.
  
2. Steven wants to buy 7 retired baseball cards. Each baseball cards costs \$4. Steven has \$32. Does he have enough money to buy 7 retired baseball cards? Show your work.

3. Allison earned money babysitting over the school break. She got paid \$5 an hour. She babysat for 12 hours. Her brother Eric earned money mowing lawns. He got paid \$9 for each lawn. He mowed 7 lawns. Who made more money, Allison or Eric? Show your work.
  
4. Derrick had 32 golf balls in his golf bag. Then he lost two of them the last time he played. He wants to divide his golf balls evenly into five containers. How many golf balls can go into each container? Show your work.

**Check Your Answers:**

1. Sarah has \$48 in her piggy bank. Sarah wants to add to her jump rope collection. Each jump rope costs \$8. How many jump ropes can Sarah buy? Show your work.  
 **$48 \div 8 = 6$**
2. Steven wants to buy 7 retired baseball cards. Each baseball cards costs \$4. Steven has \$32. Does he have enough money to buy 7 retired baseball cards? Show your work.  
 **$7 \times 4 = 28$ , **28 is less than 32****
3. Allison earned money babysitting over the school break. She got paid \$5 an hour. She babysat for 12 hours. Her brother Eric earned money mowing lawns. He got paid \$9 for each lawn. He mowed 7 lawns. Who made more money, Allison or Eric? Show your work.  
 **$5 \times 12 = 60$**   
 **$9 \times 7 = 63$**   
**63 is more than 60**
4. Derrick had 32 golf balls in his golf bag. Then he lost two of them the last time he played. He wants to divide his golf balls evenly into five containers. How many golf balls can go into each container? Show your work.  
 **$32 - 2 = 30$   $30 \div 5 = 6$**