# When Division Is Not Exact
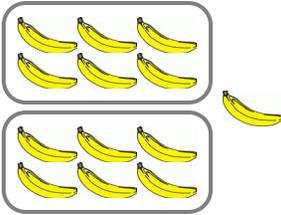
If you divide 13 bananas evenly between Joe and Sally, how many does each one get?

$$13 \div 2 = ?$$

Joe and Sally each get 6 bananas and one is left over. We write this as:

$$13 \div 2 = 6 \ R1$$

The leftover banana is called **the remainder**, and is indicated after the letter R.

(If we didn't want any leftovers, then both could get 6 1/2 bananas.)

1. Fill in the blanks.

a. 14 bananas divided among 3 people gives 4 bananas to each and 2 bananas that cannot be divided evenly.
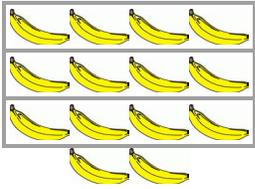
$14 \div 3 = 4$, remainder 2

b. 14 carrots divided among 5 people gives 2 carrots to each and 4 carrots that cannot be divided evenly.
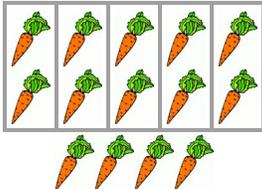
$14 \div 5 = 2$, remainder 4

c. 8 scissors divided among 5 people gives 1 pair of scissors to each and 3 pairs that cannot be divided evenly.
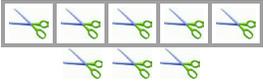
$8 \div 5 = $ ____, remainder _____

d. 3 apples divided among 5 people means we cannot share them equally. So, no one gets any apples. All 3 are left over.

$3 \div 5 = 0$, remainder ____

e. ____ rams divided among 6 people gives ____ rams to each and ____ rams that cannot be divided evenly.
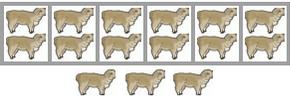
____ $\div 6 = $ ____, remainder ____.

f. ____ camels divided between 2 people gives ____ camels to each person, and ____ camel left over.
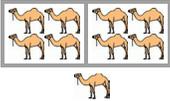
____ $\div 2 = $ ____, remainder ____.
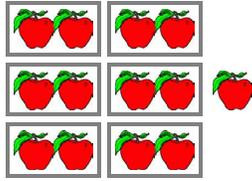
Here's another way of looking at division and remainder.
How many groups of 2 can we make out of 13 apples?

We can make six groups. One apple is left over.

$$13 \div 2 = 6 \text{ R1}$$

2. Divide the dots into groups and write a division sentence.

a. Divide into groups of 3.	**b.** Divide into groups of 4.	**c.** Divide into groups of 6.	**d.** Divide into groups of 5.
$20 \div 3 = $ _____ remainder _____	$21 \div 4 = $ _____ remainder _____	_____ $\div 6 = $ _____ remainder _____	_____ $\div 5 = $ _____ remainder _____
e. Divide into groups of 7.	**f.** Divide into groups of 9.	**g.** Divide into groups of 3.	**h.** Divide into groups of 5.
_____ $\div 7 = $ _____ remainder _____	_____ $\div 9 = $ _____ remainder _____	_____ $\div 3 = $ _____ remainder _____	_____ $\div 5 = $ _____ remainder _____

$4 \div 5 = ?$

How many groups of 5 can we make out of 4 apples?

No groups. All four apples are left over.

$$4 \div 5 = 0 \text{ R4}$$

3. Divide and indicate the remainders.

a. $7 \div 2 = $ ____ R ____ $1 \div 2 = $ ____ R ____	**b.** $3 \div 4 = $ ____ R ____ $11 \div 2 = $ ____ R ____	**c.** $18 \div 5 = $ ____ R ____ $7 \div 6 = $ ____ R ____