Name____

Howard University

4th Grade Math

Remote Learning Packet

December 7-11, 2020

Name: ____ December 7, 2020
BCCSG Howard

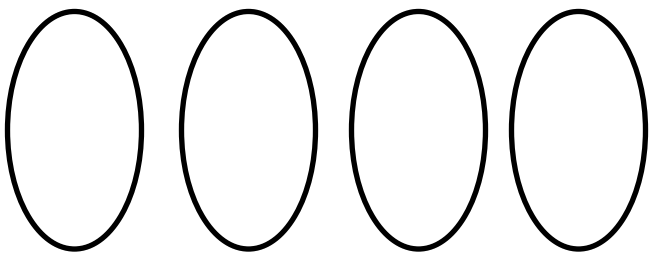
Module 3, Lesson 14

Learning Target: I can solve division word problems with remainders.

Input

Divide a two-digit number by a one-digit number modeled with an array.

1. **There are 12 students in PE class separated into 4 teams. How many students are on each team?**



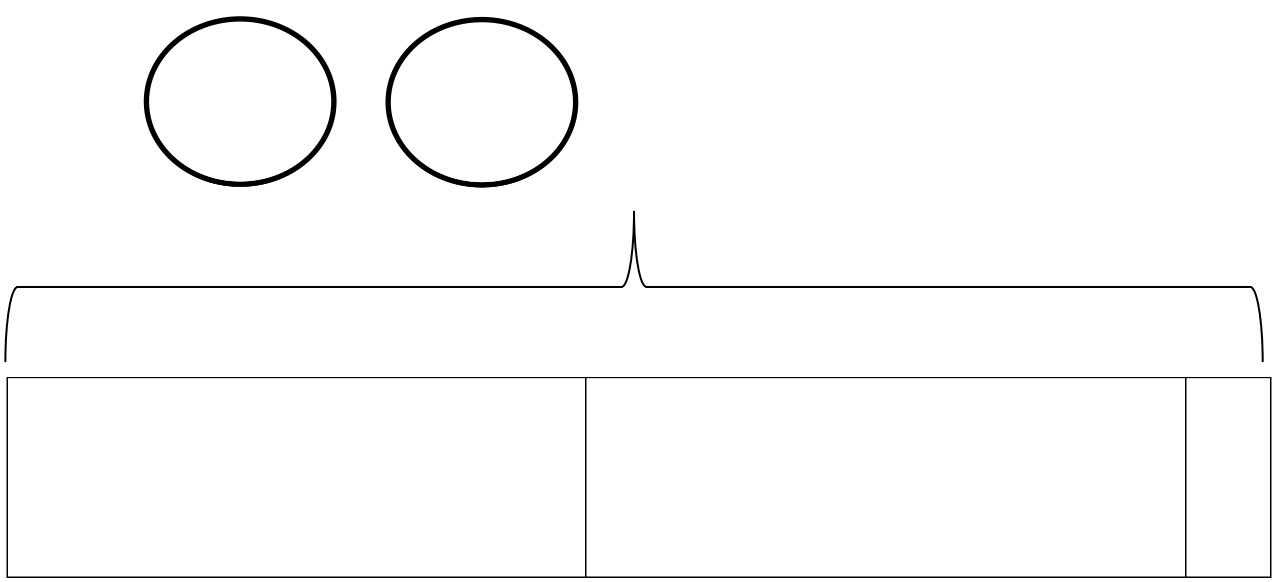
What is a division expression that matches the situation? ________________. What is the quotient? The quotient is _______. How many students are on each team? There are ______ students on each team. How can you check to make sure your division was correct? I can count by ______ four times to get 12, or I can multiply _____ times _____ to get 12. Does this quotient tell us the size of the group or the number of groups? It tells us the __________ of the groups. Let's try revising the story: There are 12 students in PE class but now 3 students are needed on each team. How many teams can be made? ________ teams. What is the division expression for the new story? _____________________. Does the quotient tell us the size of the group or the number of groups? It tells us the ____________ of groups. The same array can represent a situation with the group size unknown *or* the number of groups unknown.

Divide a two-digit number by a one-digit number with a remainder modeled with an array.

2. **One more student joined the class described at the beginning of Problem 1. There are now 13 students to be divided into 4 teams. I can represent _____ in _____ groups. Four groups of ______ make 12, but I have one left over. One student won't be on a team. What is an expression to represent this problem? ______________________. When we divide a number into equal groups sometimes there is an amount leftover. We call that number that we have left a *remainder*. What is the quotient in this division problem? The quotient is ______. What is the remainder? ______. We state our answer by saying the quotient and then the remainder. The quotient is ______. The remainder is _______. We can also say, or write, "the quotient is 3 with a remainder of 1." How can ' we check our answer using multiplication? What if there are 13 students in PE class and three students are needed on each team. How many teams can be made? What is the new expression? The new expression is 13 ÷ 3 and the quotient is ______ and the remainder is ______. What do the quotient and the remainder mean in this second story? _______ teams can be made and there is _____ extra person.**

Divide a two-digit number with a remainder modeled with a tape diagram.

3. **Kristy bought 13 roses. If she puts 6 roses in each vase, how many vases will she use? Will there be any roses left over?**



Divide a two-digit number by a one-digit number, interpreting the remainder.

4. **Allison has 22 meters of fabric to sew dresses. She uses 3 meters of fabric for each dress. After how many dresses will Allison need to buy more fabric?**

CFU:

1. **If it takes 8 inches of ribbon to make a bow, how many bows can be made from 3 feet of ribbon? (1 foot = 12 inches)? Will any ribbon be left over? If so, how much?**

2. **The baker has 42 kilograms of flour. She uses 8 kilograms each day. After how many days will she need to buy more flour?**

Name: ____ December 8, 2020

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Module 3, Lesson 15

Learning Target: I can understand and solve division problems with a remainder using the array and area models.

Input

Solve a division problem with and without a remainder using the area model.

1. **Draw an array to represent 10 ÷ 2.**

Label your rectangle with an area of 10 square units and a width of 2 units. How can we find the length of the unknown side?

2. **Draw a rectangular area model to represent 11 ÷ 2**

3. **Draw a rectangular area model to represent 16 ÷ 3**

4. **Draw a rectangular area model to represent 23 ÷ 4**

CFU:

1. **Solve using an array and an area model: 29 ÷ 3**

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Module 3, Lesson 16

Learning Target: I can solve understand and solve two-digit dividend division problems with a remainder in the ones place by using number disks.

Input

1. **6 ÷ 3**

What does 6 ones represent? It represents the __________ or the ___________. It is what we are dividing. What is the number we are dividing by? We are dividing by ______. Let's assume it is telling us how many groups to make, and draw 3 groups below. Can we distribute 6 ones into 3 groups? We can think of it like dealing cards evenly among 3 players. First, you put one in each group. Cross off the ones one at a time as you distribute them evenly. Next, put another one in each group if you are able and continue this until all of the ones are distributed. How many can we put in each group? We can put _______ in each group. Are there any ones left over? ______, there are not. How many ones are in each of our 3 groups? Write a number sentence that shows the division problem we just solved: ____. Let's represent 6 ÷ 3 in a new way. Let's record the whole and the *divisor.* 6 ones divided by 3 ones is _________ ones. Is there a remainder? ______, we divided 6 ones and have no ones remaining

2. 36 ÷ 3

3 tens and 6 ones represent the ____________. Show 36 using number disks. What is the number that we are dividing by? _______. Make room for 3 groups below. Let's start dividing with the largest units. What is the largest unit? The ________. 3 tens divided by 3 is ______ ten. Distribute the 3 tens and cross them off to show they are now divided equally into the 3 groups. Are there any tens left over? _______. 6 ones divided by 3 is _____ ones. Distribute the ones evenly, one at a time, into each group. Cross off the ones as you distribute them. Are there any ones left over? _______. What is 36 ÷ 3? It is ___________.

3. 5 ones ÷ 4

Watch as I draw my place value chart. Now, do the same, and represent the whole and the divisor on your chart. 5 ones divided by 4 equals? It does ________ divide evenly. I can place _____ in each group, but I will have _____ left over.

4. **45 ÷ 4**

5. **68 ÷ 3**

CFU (Submit in Chat Box):

1. **8 ÷ 3**

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Module 3, Lesson 17

Learning Target: I can represent and solve division problems requiring decomposing a remainder in the tens.

Input

Divide two-digit numbers by one-digit numbers using number disks, regrouping in the tens.

1. **Draw your place value chart to represent 3 ÷ 2**

2. **30 ÷ 2**

3. 4 ones ÷ 3

4. 42 ÷ 3

5. 84 ÷ 3

CFU (Submit in Chat Box):

1. **50 ÷ 2**

Name: ____ December 11, 2020
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Module 3, Lesson 18

Learning Target: I can find whole number quotients and remainders.

Input

Divide a two-digit number by a one-digit divisor with a remainder in the tens place.

1. **5 tens 7 ones ÷ 3**

Let's divide 57 into _____ equal groups. Let's divide 5 tens first. Why would we divide the tens first? Because when we divide, we always start with the ________________ units. We divide the tens first because we may have to change _______ for ones. 5 tens divided by 3 is _____ ten in each group with _____ tens remaining. How do we divide the remaining two tens? WE can unbundle 2 tens as _____ ones. Now how many ones do we have altogether? We have _____ ones. You know your threes facts! What is 27 ones divided by 3? It is _____ ones.

2. **8 tens 6 ones ÷ 5**

We solved 57 divided by 3 by unbundling, so let's try another example! How many groups are we dividing 86 into? ________ groups. We start with the tens. Divide 8 tens into 5 groups. That is _____ ten in each group and _____ tens remaining. What will we do with the remaining tens? We can unbundle them as ones. 3 tens unbundles as _____ ones. How many ones do we have altogether? _____ ones. Now, divide 36 ones into 5 groups. That's _____ in each group with _____ remaining.

3. **7 tens 4 ones ÷ 8**

What is tricky about this problem? You can't divide 7 tens into 8 groups! What will we do to solve this? Think of your eights facts. I'm thinking of an eights fact whose product is close to 74. Can you think of what it is? 8 x _______ = 72. How can we say this as a division equation? 74 divided by 8 equals ______ with a remainder of ______.

CFU (Submit in Chat Box):

1. **95 ÷ 4**