Topic C Quiz Prep (Lessons 12 – 16)

Item 1: Divide:
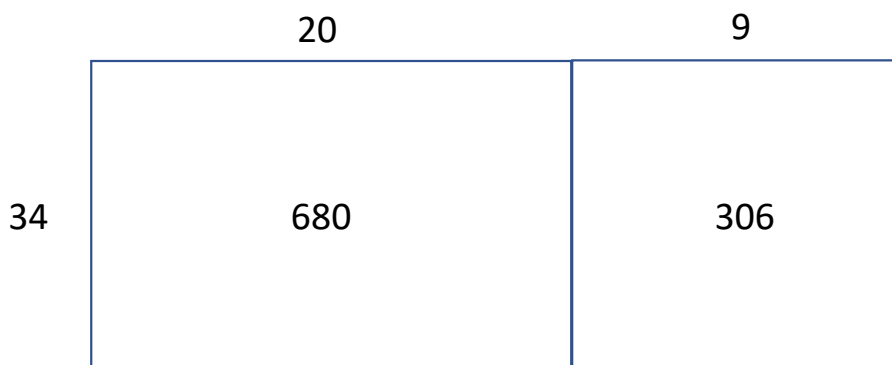
$$6,600 \div 40$$

You can solve this using any method you are most comfortable with. Here are two methods.

```
          5
         60
        100
      _____
   40 ) 6,600
        - 4,000
        _____
          2,600
          2,400
          _____
            200
          - 200
          _____
              0
```

```
              X165
      _____
   40 ) 6600
        -40
        _____
          260
        - 240
        _____
          200
        - 200
        _____
            0
```

Item 2: Consider the Model:

20	9
680	306

34 (on left side)

Area Models can be used to multiply. They can also be used to divide.

This area model shows **34 x 29 = 986**
680 + 306 = 968

The same area model can show the inverse. **968 ÷ 34 = 29**
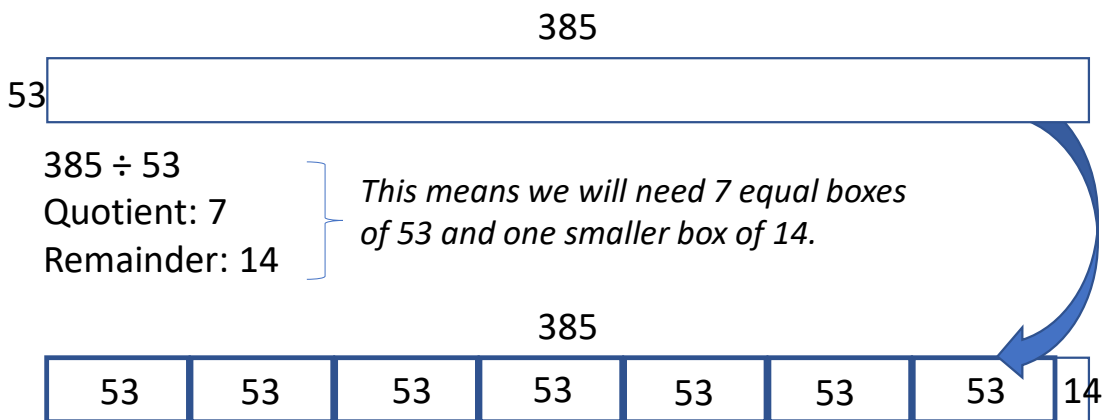
34 is the **divisor**
680 + 306 = 986 is the **dividend**
20 + 9 = 29 is the **quotient**

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Tape diagrams are visual representations of division problems. The long rectangle represents the <u>dividend</u> (the total amount being divided). The number on the left of the box is the <u>divisor</u>.

Item 3: Complete the tape diagram to show the quotient.

385

53 |

385 ÷ 53
Quotient: 7
Remainder: 14

This means we will need 7 equal boxes of 53 and one smaller box of 14.

385

| 53 | 53 | 53 | 53 | 53 | 53 | 53 | 14 |

The best place to start is by <u>estimating</u>.
385 ÷ 53   400 ÷50 = 8
This tells us that we will need to divide this rectangle in ABOUT <u>8 equal pieces of 50</u>.

Next, do the actual division problem and find the **<u>quotient</u>**. That will tell you how many boxes to draw.

Item 4: Estimating the Quotient

For each expression, **estimate the quotient**. Make a mental math problem. Then tell whether the quotient is less than 10 or greater than 10.

Expression	Less than 10	Greater than 10
444 ÷ 61		
971 ÷ 34		
725 ÷ 55		

<u>42</u>0 ÷ <u>6</u>0 = 7   less than 10

<u>99</u>0 ÷ <u>3</u>0 = 33   greater than 10

<u>72</u>0 ÷ <u>6</u>0 = 12   greater than 10

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Item 5: Divide:

$$843 \div 51$$

Quotient: 16
Remainder: 27

```
        6
       10
   _____
51 ) 843
     - 510
     _____
      333
     -306
     _____
       27
```

```
       X16
   _____
51 ) 843
     -51
     _____
      333
     -306
     _____
       27
```

Item 6: Word Problem:

Mr. Briganti has 3,400 Lego blocks. There are 26 students in the Lego Club.
Each student gets the same number of Lego blocks.

How many Lego blocks does each student get?   **Each student gets _____ Lego blocks.**
How many Lego blocks are left over?   **There are _____ Lego blocks left over.**

$3,400 \div 26$
Quotient: 130
Remainder: 20