Math 2 Homework 26

_____TIME FIRST PAGE_____

1

Fill in missing numbers:

__ × 8 = 64 __ × 7 = 49 __ × 6 = 54 __ × 8 = 16 __ × 2 = 20

__ × 7 = 63 __ × 5 = 45 __ × 8 = 40 __ × 4 = 36 __ × 8 = 24

4 ×__ = 16 6 ×__ = 36 10 × __ = 60 9 × __ =18 3 × __ = 27

2

Use rectangles to solve the equations:

Y ÷ 9 = 8 45÷ X = 5 Z × 6 = 48

3

Solve each expression using the correct order of operations

72 ÷ 9 – 4 × 3 ÷ 6 +20 ÷ (5 – 2) × 3 =_____

90 – 36 ÷ 9 × 9 – (8 + 5 × 2) =_____

3 × 8 ÷ 8 + 27 ÷ 3 × (2 + 1) =_____

Report the time you spent: _____ minutes

4

Solve the equations:

$4 \times x = 32$ $y \times 8 = 56$ $9 \times z = 72$

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48 ÷ x = 8 63 ÷ y = 7 z ÷ 9 = 45

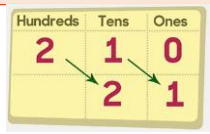
Division by 10, 100, 1,000, etc.

When you divide a number by 10, the value of each of its digits decreases ten times. Hence, the value of the whole number decreases ten times.

Example: 460 ÷ 10 = 46 tens ÷ 10 = 46

When you divide a number by 100, the value of each of its digits decreases hundred times. Hence, the value of the whole number decreases hundred times.

*Example: 46**00** ÷ 100 = 46 hundreds ÷ 100 = 46*



210 ÷ 10 = 21

5 Calculate:

40 ÷ 10 = 560 ÷ 10 = 3300 ÷ 10 = 7800 ÷ 10 =

5800 ÷ 100 = 2100 ÷ 100 = 3300 ÷ 100 = 7800 ÷ 100 =

6 Write an expression for each word problem:

n apples were divided among ***x*** kids. How many apples did each kid receive? _____

x cookies were distributed evenly into ***m*** boxes. How many cookies are in each box? _____

7 Solve the equations and check the answers.(350 – x) + 250 = 315 x – (400 – 67) –100= 170

x + (456 –123) = 895

8 In the numbers below, some of the digits accidentally got erased. These digits are indicated with the wild-card symbol *. Where possible, compare the numbers using >, <, or =. Cross out the pairs which are impossible to compare.

9 ☐ *1 **3 ☐ 8 **8 ☐ **6

2* ☐ *7 59 ☐ 1** 295 ☐ 2*4

4* ☐ 46 3** ☐ 5** 75* ☐ 74*

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9 Construct a rectangle 2 cm by 6 cm and find its perimeter. Then, construct a square with the same perimeter.

10 Solve the problems.

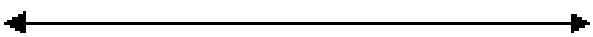
a) There are six minivan taxis at the airport, and each can hold seven passengers. How many passengers can the taxis take in total? _____

b) The airplane had 56 passengers. Each minivan taxi can hold seven passengers. How many minivan taxes are needed to take these passengers to a hotel? _____

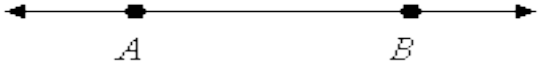
Geometry review

11 Review of Lines, Rays and Segments

In geometry, ***a line*** is straight and goes on forever. To indicate that a line goes on forever, we usually draw lines with arrows on both ends, like this:



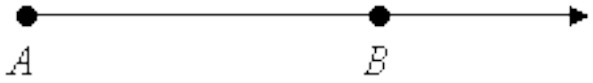
Lines are sometimes labeled by indicating two points on them and placing a double arrow over the names of the points (which are capital letters). For example, the line that goes through points *A* and *B* might be labeled as: $\overleftrightarrow{AB}$



If we choose a point on a given line, this divides the line into two pieces or "halves." Each half is called **a *ray***. More precisely, a *ray* consists of a point on a line, called its *vertex*, and all points on one side (or half) of that line. A ray goes on forever, but only in one direction. We draw rays with an arrow on one side only, like this:

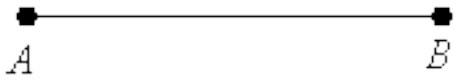
Rays are labeled by specifying the vertex and some other point on it and placing an arrow over these letters.

Ray $\overrightarrow{AB}$ would look like this:



If we choose two distinct points on a line, the line is split into three pieces. The piece that consists of those two points and all the points between them is called **a *segment*.** Segments do not go on forever, so we do not put arrows on their ends. The endpoints of segments are called its *vertices*, and we label segments by specifying the endpoints and placing a line without arrows over these letters.

Segment $\overline{AB}$ would look like this:



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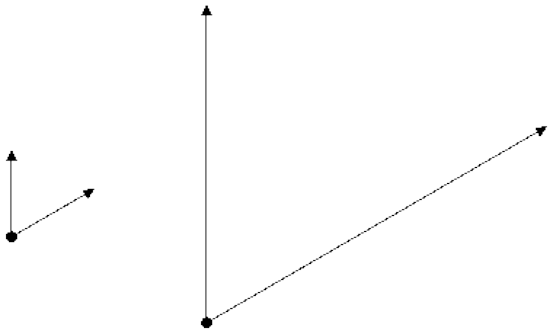
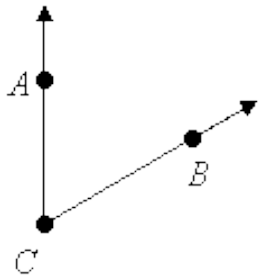
Review of Angles

Recall that ***an angle*** is made of two rays with a common vertex. The rays are the *sides* of the angle, and they go on forever. This means it doesn't matter how long you draw those rays, so the following two angles are really the same size even though they look different:



Angles are sometimes labeled using letters of three points on them, the vertex and one on each side of the angle. The vertex-letter is always the middle letter. There are two names we could give the following angle. It could be labeled $\angle ACB$ or $\angle BCA$:

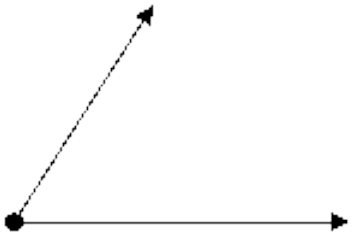


Properties of Angles

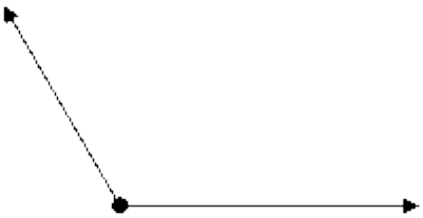
Definition: When the rays are the two halves of a line (they point in opposite directions), the angle is called **a *straight angle*:**

Definition: When the sides of an angle are perpendicular, the angle is called **a *right angle***. For now, we are using right angle template to draw right angle.

Right angle



Acute angle



Obtuse angle