## school <br> nova

## Homework 26

1. 

Fill in missing numbers:
$\ldots \times 8=64$

$$
\ldots \times 7=49
$$

$\ldots \times 6=54$
$\ldots \times 8=16$
$\ldots \times 2=20$
$\ldots \times 7=63$
$\ldots \times 5=45$
$\ldots \times 8=40$
$\ldots \times 4=36$
$\ldots \times 8=24$
$4 \times \_=16$
$6 \times \ldots=36$
$10 \times \ldots=60$
$9 \times \ldots=18$
$3 \times \ldots=27$
2. Solve each expression using the correct order of operations
$72 \div 9-4 \times 3 \div 6+20 \div 5=$ $\qquad$
$90-36 \div 9 \times 2-(8+5 \times 2)=$ $\qquad$
$3 \times 8 \div 6+27 \div 3 \times(2+5)=$ $\qquad$
3. Elizabeth is three years younger than her brother Ken. Ken is 29 years younger than his mother. Ken's father is 37 , two years older than Ken's mother. How old is Elizabeth?
4. Use rectangles to solve the equations:
$Y \div 9=8$
$45 \div X=5$
$Z \times 6=48$



5. Solve the problems.
A. There are 217 oak trees, 326 pine trees, and 78 maple trees in a park. What is the total number of these three types of trees growing in the park?

B. To build a house Bear bought 524 white bricks and 316 red bricks. How many bricks did he buy? How many more white bricks than red bricks did he buy?
C. Fox has brought to the construction project 275 liters of paint. There were $96 L$ of yellow paint and $38 L$ less green paint than there were yellow. How many liters of paint other than yellow and green was brought?

D. On three 2nd grade teams (2A, 2B \& 2C ) there are 90 students. There are 34 students on the 2A team, there are 2 more students than that on the 2B team. How many students are on the 2C team?

What other questions can you ask?


Write the question and find an answer
6.

Imagine that there is a bug crawling over the surface of a solid polyhedron. Trace with a solid red line the parts of the path you would be able to see. Trace with dashed lines the parts of the path that you would not be able to see.

7. The front and top views of a three-dimensional figure are shown. Identify the figure.

| Front View | Top View |  |
| :---: | :---: | :---: |
| $\square$ | $\square$ |  |
| $\square$ |  |  |
|  |  |  |


8.

Betty is on the first floor right now. Help Betty to get to the roof and save her laundry from the rain.


## Geometry review

## 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 $\overleftrightarrow{A B}$ :


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 $\overrightarrow{A B}$ 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 $\overline{A B}$ would look like this:


## 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 $\angle A C B$ or $\angle B C A$ :


## 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

