1.1 - Points, Lines, and Planes

1) Review Algebra Test

2) Notes 1.1: Geometry’s Building Blocks

3) Notes 1.1: First Geometry Postulates

4) Assignment

5) Class Close: What to expect tomorrow

Algebra 1 Post Test

\[
\begin{align*}
8 - 7w &= -27 \\
-8 & \quad -8 \\
-7w &= -35 \\
\frac{-7w}{-7} & = \frac{-35}{-7} \\
w & = 5
\end{align*}
\]

\[
\begin{align*}
3(4x - 12) &= -2(2x - 3) \\
12x - 36 &= -4x + 60 \\
16x & = 96 \\
x & = 6
\end{align*}
\]

\[
\begin{align*}
5 - \frac{3x}{5} & = 15 - 5 \\
-\frac{3x}{3} & = 75 - \frac{75}{3} \\
x & = -25
\end{align*}
\]

\[
\begin{align*}
\frac{-3x}{5} & = 15 - \frac{5}{3} \\
x & = -\frac{75}{3} \\
x & = -25
\end{align*}
\]
Algebra 1 Post Test

\[ \frac{x + 3}{6} = \frac{x - 4}{4} \]

\[ 6(x - 4) = 4(x + 3) \]

\[ 6x - 24 = 4x + 12 \]

\[ ; \]

\[ x = 18 \]

\[ -\frac{8x}{8} = \frac{36}{8} \]

\[ x = -4\frac{1}{2} \]

\[ 4x^2 - 3x + 12 - 12x^2 + 4x - 5 \]

\[ -8x^2 + x + 7 \]

\[ (x - 3)^2 \]

\[ (x - 3)(x - 3) \]

Algebra 1 Post Test
The Undefined Terms

**Point**
- has no dimension (0-D)
- no length, width, or thickness
- represented by drawing a dot
- named by a capital letter

**Line**
- has no thickness or width, only has length (1-D)
- represented by drawing double arrows
- named by a lowercase script letter or by a line over two capital letters

**Plane**
- a plane extends indefinitely in four directions but has no thickness (2-D)
- represented by drawing a four sided figure
- named by upper case script letter or three non collinear points

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**Other Building Blocks**

**Line Segment**
- a piece of a line determined by two endpoints
- contains the two endpoints and all the points between
- named by two endpoints with a bar over them

**Ray**
- a piece of a line with one endpoint and extends forever in one direction
- named by the endpoint and a directional point

*Order Matters!*

**Opposite Rays**
- two rays with a common endpoint and form a line

**Collinear**
- "objects" that lie on the same line

**Coplanar**
- "objects" that lie on the same plane
Your First Geometry Postulates

**Determining**
Through any two points, there is exactly one line

Through any three non-collinear points, there is exactly one plane

If two points lie in a plane, the line they determine is also in the plane on the same plane

**Intersection**
If two lines intersect, their intersection is a point

If two planes intersect, their intersection is a line

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**Assignment (Due Thursday, Sept 4)**

1) Pg. 9, #13-28, 30-33, 39-41

2) Check out website and parent letter

3) Think of any questions about the course so far