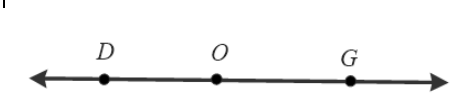
Geometry
Lesson #2: More Foundations of Geometry

Name: _____
Period: _____

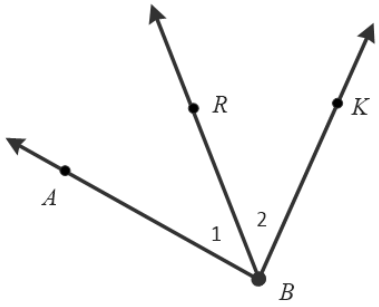
1. Algebra Review: Simplifying Radicals – writing in simple radical form.

a) $\sqrt{25}$	b) $\sqrt{49}$	c) $\sqrt{20}$	d) $\sqrt{15}$
e) $\sqrt{45}$	f) $\sqrt{32}$	g) $5\sqrt{18}$	h) $4\sqrt{2100}$

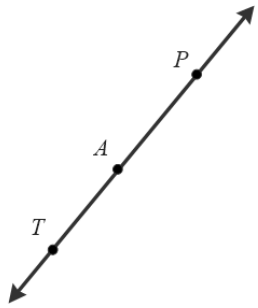
2. Clarifying Questions:



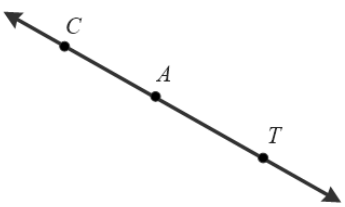
a) Is $\overleftrightarrow{DO}$ the same as $\overleftrightarrow{OG}$? Why or why not?



b) Which is $\angle B$?



c) Are *T*, *A*, and *P* collinear or coplanar? Explain.



d) Is $\overrightarrow{CA}$ the same as $\overrightarrow{AC}$? Why or why not?

Sketching Intersections:
Two or more geometric figures intersect when they have one or more points in common. The intersection of the figures is the set of points the figures have in common.

3. Draw each figure.

a) Line *a* intersecting $\overline{BC}$ at *F*.	b) Plane $\mathcal{A}$ and line *b* such that line *b* is in plane $\mathcal{A}$.
c) Plane $\mathcal{A}$ and $\overleftrightarrow{FG}$ such that $\overleftrightarrow{FG}$ does not intersect plane $\mathcal{A}$.	d) Plane $\mathcal{A}$ and line *b* such that line *b* intersects plane $\mathcal{A}$ at *C*.
e) Two planes the intersect in line *f*.	f) Two planes that do not intersect.
g) $\overrightarrow{AR}$ and $\overleftrightarrow{AT}$	h) $\overrightarrow{CA}$ and $\overleftrightarrow{AT}$

HW #2: Do work in notebook. Solve the following equations. Copy the problem and show each step vertically.

1. $3x+8=7x-12$	2. $10x-1-4x=5$	3. $2(3x-2)=2(x-8)+4x$
4. $-7x+4(x-6)=-5x+8(x-3)$	5. $3+2(3x-4)=-35$	6. $4-3(2x+7)=2x-1$

Jumbled Answers (with some extras): $x=1$; no solution; $x=\frac{2}{3}$ $x=5$, $x=-5$, $x=-2$, $x=0$, $x=4$

Use substitution to find the value of each expression. $w=4$, $x=\frac{-2}{3}$, $y=\frac{1}{2}$, $z=-3$

7. $3w-2z$	8. $\sqrt{w}+5z^2$	9. $x+y$
10. $5xy$	11. $\frac{x}{y}$	12. $-4x-2y$

Jumbled Answers (with extras): 47, $\frac{-1}{6}$, $\frac{3}{8}$, $\frac{5}{3}$, 18, $\frac{-5}{3}$, $\frac{-4}{3}$, $\frac{5}{6}$

<u>And</u> from your textbook: p. 56: 1-4, 6