

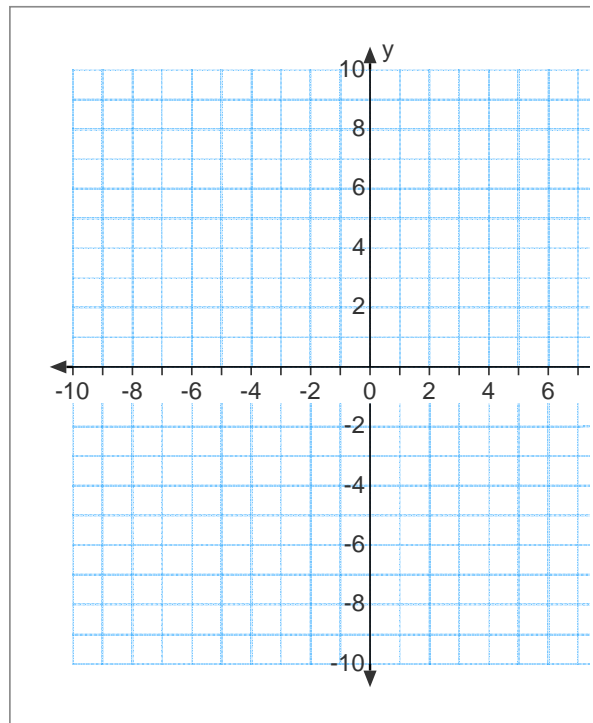
Geometry Week 7 Tuesday WARM-UP

Give a counterexample that demonstrates the statement is false.

1. If a polygon has four sides, then it is a rectangle.
2. If $x^2 = 25$, then $x = 5$.
3. Which property allows us to say that $3(x - 5) = 3x - 15$?
4. Write the inverse of the following statement:
If it's Sunday, then I am watching football.
5. Write the contrapositive of the statement:
If Cody is on time to class, then I am happy.
6. Write the converse of the following statement:
If it's cold outside then Morgan has her blanket.
7. Solve the following equation and identify the property used for each step.

$$3(2x - 7)x = 33$$

8. Graph the solutions to: $2x - y > 5$



Geometry Week 7 Block Day

1. Solve the following system:

$$3x - 2y = -10$$

$$y = 4x$$

Ordered pair!

2. Use the table to guess the number

Guess	D	P
123	0	0
456	1	0
789	2	0
958	3	1

3. Give the property that justifies each statement.

$$17x - 3 = 8x + 5 \quad \text{Given}$$

$$9x - 3 = 5$$

$$9x = 8$$

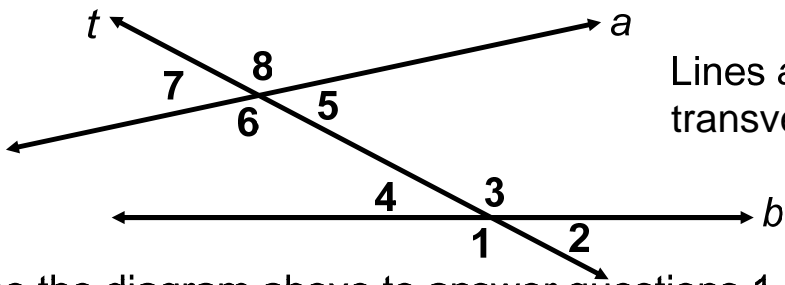
$$x = \frac{8}{9}$$

4. Rewrite the biconditional statement as a conditional statement and its converse.

Two planes intersect if and only if they contain the same line.

5. Give a counterexample to show that the statement is false.

If $|x| = 5$, then $x = 5$.



Lines a and b are cut by transversal t .

Use the diagram above to answer questions 1-4. Identify the following pairs of angles as linear pair, corresponding, vertical, alternate interior, alternate exterior, same side interior, or same side exterior. If no relationship, write none.

1. $\angle 7$ and $\angle 5$
2. $\angle 6$ and $\angle 3$
3. $\angle 1$ and $\angle 6$
4. $\angle 4$ and $\angle 6$

In 5-8 describe the statement as *true* or *false*. If false, explain. Assume that lines and planes that appear to be parallel are parallel.

5. $\overleftrightarrow{CB} \parallel \overleftrightarrow{HG}$
6. $\overleftrightarrow{ED} \parallel \overleftrightarrow{HG}$
7. plane $AED \parallel$ plane FGH
8. plane $ABH \parallel$ plane CDF
9. \overleftrightarrow{AB} and \overleftrightarrow{HG} are skew lines.
10. \overleftrightarrow{AE} and \overleftrightarrow{BC} are skew lines.

