

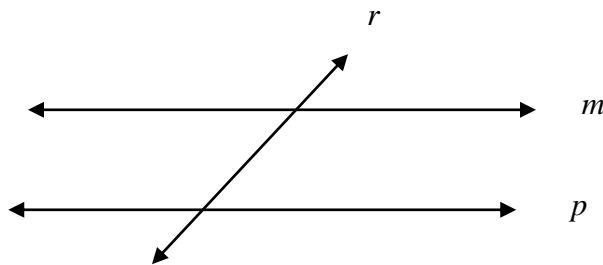


- *20 questions
- *Calculators allowed
- *Show all work/steps- use separate paper
- *Recommend time frame 30min -45min

Provide complete explanations in your responses.

Parallel Lines and Transversals

1. What is the difference between skew lines and parallel lines?
2. Can two planes be parallel?
3. Write the notation that shows lines q and t are parallel to each other.
4. If two lines are parallel to a third line must they be parallel to each other? Why?
5. Which line is the transversal?

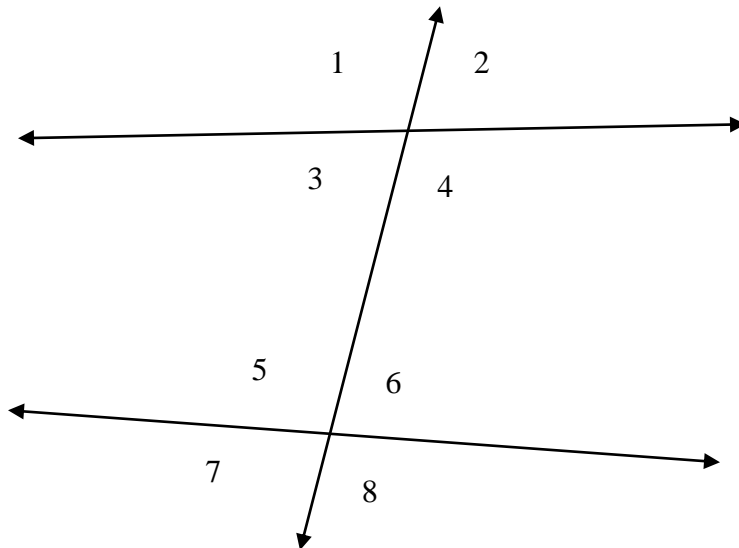


6. Classify the following angle pairs as alternate interior, same-side interior, corresponding, vertical angles or supplementary:

$\angle 1$ and $\angle 4$ $\angle 3$ and $\angle 6$

$\angle 3$ and $\angle 5$ $\angle 2$ and $\angle 6$

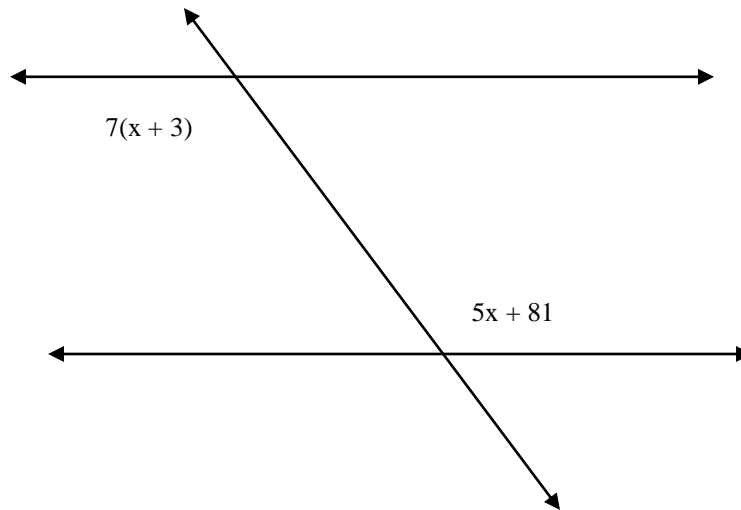
$\angle 5$ and $\angle 8$ $\angle 5$ and $\angle 6$



Properties of Parallel and Perpendicular Lines

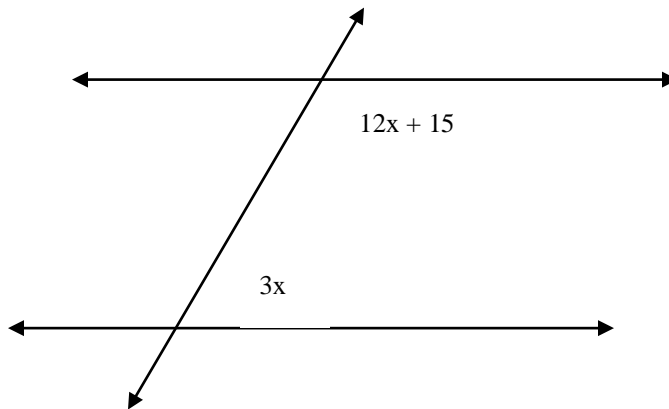
7. If two parallel lines are cut by a transversal, then the corresponding angles are _____.
8. If two parallel lines are cut by a transversal, then the same-side interior angles are _____.
9. In a plane two lines perpendicular to the same line are _____.

10. Given that the lines are parallel, find the value of the variable.



Proving Lines Parallel

11. List the five ways one could show two lines are parallel.
12. Find the value of x that would make the lines parallel.



Introduction to Polygons

13. What is a five-sided polygon called?
14. How many sides does a hexagon have?
15. Define a regular polygon
16. How many sides does a convex polygon have if the sum of the interior angles is 1440 degrees?
17. What is a scalene triangle?
18. A triangle with two congruent sides is a _____ triangle.
19. What term would best describe a triangle that has the angles measures 35° , 60° and 85° ?
20. Find the measure of angle x.

