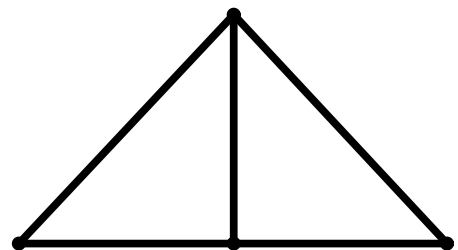


REVIEW FOR SEMESTER EXAM

1. Name 5 ways to prove triangles are congruent.
2. What do you call the point where the medians of a triangle meet?
3. In triangle ABC , $m\angle A = 30^\circ$, $m\angle B = 50^\circ$, and $m\angle C = 100^\circ$, which side is the longest?
4. Complete the theorem: The measure of the exterior angle of a triangle is equal to _____.
5. Find the midpoint of the segment from $(3, 7)$ to $(-1, 3)$.
6. In triangle ABC , M and N are midpoints of \overline{AB} and \overline{AC} respectively. Tell me two things you know about MN .
7. Are the triangles congruent? Justify your answer.

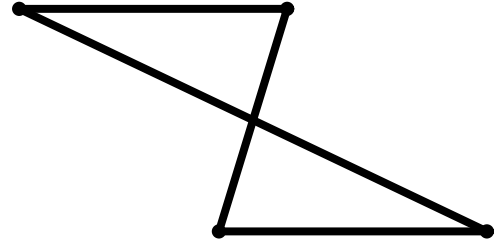


8. Triangle ABC is a right triangle with a right angle at $\angle B$, and point M is the midpoint of \overline{AC} . If $AC = 10$, then what kind of triangle is BMC ?
9. If two sides of a triangle are 6 inches and 9 inches, the third side must be less than _____.

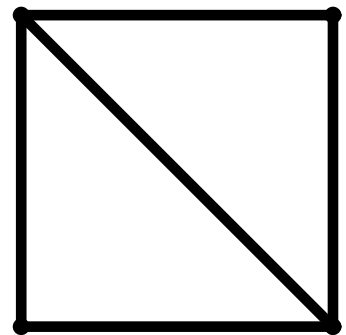
20. What book did he write?

21. Find the sum of the interior angles of a convex pentagon.

22. Are the triangles congruent? Justify your answer.



23. Is the figure a parallelogram. Justify your answer.



24. Name 5 ways to prove two lines are parallel.

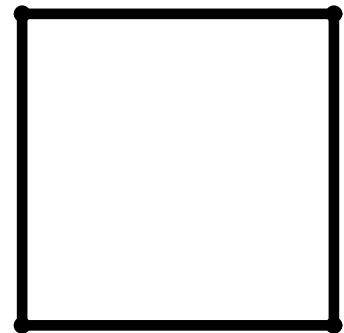
25. Name three undefined terms.

26. State the converse of the following statement: “If you meet standards on all three areas of the PSAE, then you don’t need to take final exams.”

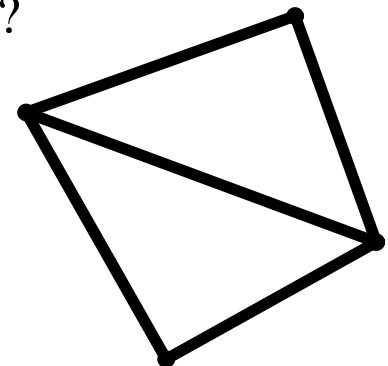
27. If B is between points A and C, then $AB + BC = AC$. Why?

28. Give three characteristics of a line.

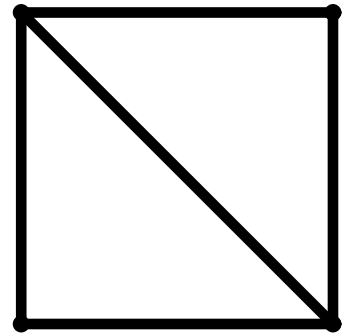
29. What property justifies the following: If $a = b$, then $b = a$.
30. Find the measure of an angle that is one-fifth of its supplement.
31. What three regular polygons will tessellate a plane?
32. Find the length of the segment from $(3, 7)$ to $(-1, 3)$.
33. Is the figure a parallelogram? Justify your answer.



34. What property justifies the following:
If $2x + 5x + 3 = 24$, then $7x + 3 = 24$.
35. If two planes intersect, what is their intersection?
36. Name the 5 reasons that you can use in a proof.
37. Are the following triangles congruent?

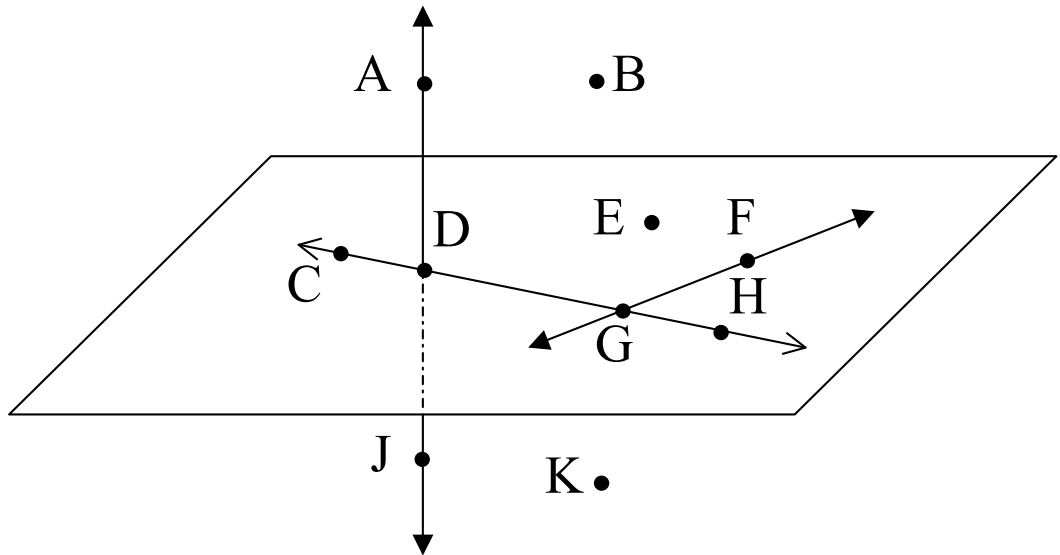


38. Give 5 ways to prove a quadrilateral is a parallelogram.
39. Find the sum of the interior angles of a decagon.
40. If the interior angle of a regular polygon is 160° , how many sides does it have?
41. Is the figure a parallelogram. Justify your answer.



42. In parallelogram ABCD, $m\angle A = 50^\circ$. Find the measures of $\angle B$, $\angle C$, and $\angle D$.
43. If each exterior angle of a regular polygon is 30° , how many sides does it have?
44. Find the area of a square with a perimeter of 40 inches.
45. What do we call two angles whose sum is 180° ?
46. What do you call the “If” part of a conditional statement.
47. If a conditional statement is true, then its converse is _____ (sometimes, always, never) true.

48. Find the area of a triangle if the base is 10 inches and the height is 8 inches.
49. Complete the following theorem: If two angles are congruent, their supplements are _____.
50. What does it mean when a polygon is regular?
51. State the inverse of the following: “If we have geometry today, then we will have homework.”
52. What is the definition of a parallelogram?
53. Complete the following theorem: In a plane if two lines are perpendicular to the same line, then they are _____ to each other.
54. The three bisectors of the angles of a triangle meet in a single point called the _____.
55. The height of a triangle is also called the _____.



56. True/False A and C are collinear.
57. True/False C and D are collinear.
58. True/False A, B, and C are collinear.
59. True/False A, B, and C are coplanar.
60. True/False A, B, D, and J are coplanar.
61. True/False All points shown are coplanar.
62. True/False \overleftrightarrow{AJ} and \overleftrightarrow{FG} intersect.
63. True/False \overline{AD} and \overline{DA} are the same.
56. True/False \overleftrightarrow{AJ} and \overleftrightarrow{JA} are the same.
57. True/False \overrightarrow{FG} and \overrightarrow{GF} are opposite rays.
58. True/False \overrightarrow{DJ} and \overrightarrow{JD} are the same.