Triangle


A 3-sided polygon (a flat shape with straight sides)
2. Angle

Ray

A line with a start point but no end point (it goes to infinity)
4. Vertex

Midpoint
A point where two or more line segments meets. A
corner of a shape. Plural is "vertices".
6. parallelogram
7. Straight Angle
8. Trapezoid
9. Linear Pair
10. supplementary angles


The middle of a line segment; the point that is halfway along a line.

a quadrilateral whose opposite sides are both parallel and equal in length


Looks like a straight line - measures $180^{\circ}$ or half of a revolution, or two right angles put together, the angle of a diameter in a circle


A 4-sided flat shape with straight sides that has a pair of opposite sides parallel.


2 angles that together form a straight line $\left(180^{\circ}\right)$ that share a vertex and a side


Two angles whose sum is 180 degrees


$$
\overline{A B} \cong \overline{C D}
$$

Having the same size and shape
12. conjecture

A theory or opinion about something without basing it in facts (a guess about something based on how it seems to be, not based on proof or facts.)
13. Radius/Radii


The distance from the center of a circle to the outside (circumference)
14. equilateral

having all sides equal
15. equidistant
16. Line Segment
17. Perpendicular

A part of a line that connects two points. It has definite end points.


Two lines that intersect to form right angles ( $90^{\circ}$ )

## 18. angle bisector


a ray that divides an angle into two congruent angles

## 19. complementary angles



Two angles whose sum is 90 degrees


An angle which is equal to $90^{\circ}$ - one quarter of a full revolution.


A pair of opposite congruent angles formed by intersecting lines


Two angles that share a common side and have the same vertex
altitude - of a triangle

the perpendicular segment from a vertex to the opposite side or to the line that contains the opposite side

## 24. median - of a triangle


a segment from a vertex to the midpoint of the opposite side
perpendicular bisector
26. Reflection

Line


A line that acts as a mirror in the form of a perpendicular bisector so that corresponding points are the same distance from the mirror.


If two sides and the included angle of one triangle are congruent to two sides and the included angle of another triangle, then the triangles are congruent


If three sides of one triangle are congruent to three sides of another triangle, then the triangles are congruent
29. ASA
30. rectangle
31. Rhombus
32. square
33. corresponding angles
,


If two angles and the included side of one triangle are congruent to two angles and the included side of another triangle, then the triangles are congruent

a quadrilateral with four right angles


A parallelogram with four congruent sides

A parallelogram with four congruent sides and four right angles.


$$
\angle 2 \cong \angle 6
$$

the angles that occupy the same relative position at each intersection where a straight line crosses two others. If the two lines are parallel, the corresponding angles are equal.
34. alternate
interior angles

## 35. same side <br> interior angles


two interior angles on the same side of the transversal

## 36. Transversal

 Line38. similarity
for
polygons




Figures that have the same shape but not necessarily the same size - sides are proportional, angles are equal
39. AAA conjecture

AA
Conjecture
If two triangles have congruent angles, then the two triangles are similar


Given: $\angle A \cong \angle D, \angle B \cong \angle E$

## Conclusion: $\triangle A B C \sim \triangle D E F$

If two angles in a triangle are congruent, then the third also must be congruent, thus the two triangles are similar.
scale factor
42. dilation
43. Pythagorean

Theorem
a


$$
c^{2}=a^{2}+b^{2}
$$

$a^{2}+b^{2}=c^{2}$ where $a$ and $b$ represent the legs of $a$ right triangle and $c$ represents the hypotenuse


5 sided polygon
45. Quadrilateral


> A flat shape with four straight sides

Polygons

a closed figure, all straight lines, and no intersecting lines

