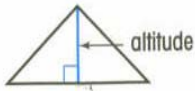


Mathematics Assessment Anchor Glossary Grade 11

The definitions for this glossary were taken from one or more of the following sources: Webster's Dictionary, various mathematics dictionaries, the PA Mathematics Standards glossary and various textbook glossaries.

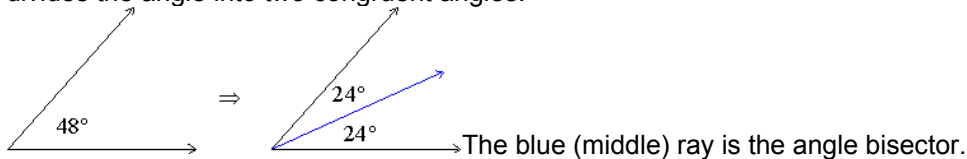
Absolute value: A number's distance from zero on a number line. The absolute value of $+2$ is equal to the absolute value of -2 .

Altitude (of a triangle): A segment drawn from a vertex of a triangle and perpendicular to the opposite side or to the line containing the opposite side.



Analytic geometry: A branch of geometry in which points are represented with respect to a coordinate system, and in which the approach to geometric problems is primarily algebraic.

Angle bisector: A ray in the interior of an angle, whose endpoint is the vertex of that angle, and divides the angle into two congruent angles.



Arc: A continuous part of a circle between two points on the circle.

Binomial: A polynomial with two terms (e.g., $7a + 4b$).

Central angle:

- Of a circle: An angle whose vertex is the center and whose sides are the radii of the circle.
- Of a regular polygon: An angle whose vertex is the center and whose sides intersect the regular polygon at adjacent vertices.

Circumscribed polygon: A polygon that surrounds a circle with each of its sides tangent to the circle.

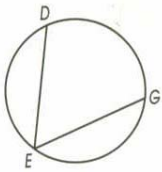


Dependent events: Two events in which the outcome of one event affects the outcome of the other event.

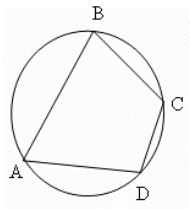
Direct proportion: Two quantities that always have a constant ratio. A direct variation is described by an equation of the form $y = kx$, where k is a constant not equal to zero.

Exponential function: An exponential function is a function that can be described by an equation of the form $y = a^x$, where $a > 0$ and a does not equal 1.

Inscribed angle: An angle whose vertex is on the circle and whose sides are chords of the circle.



Inscribed polygon: A polygon surrounded by a circle, where each of its vertices fall on the circle.



Interquartile range: The difference between the first and third quartile.

Inverse proportion: Two quantities that are inversely related. An inverse variation is described by an equation of the form $xy = k$ or $y = k/x$, where k is a constant not equal to zero.

Irrational number: Numbers that cannot be written as a ratio of two integers. It is a non-repeating, non-terminating decimal.

Line of best fit (regression line): A line drawn on a scatter plot to best estimate the relationship between two sets of data.

Median (of a triangle): A line segment that connects a vertex of a triangle to the midpoint of the side opposite that vertex.

Midpoint: The point on a line segment that is halfway between the endpoints of that segment.

Monomial: A monomial is a number, a variable, or a product of a number and one or more variables (e.g., $7ab$).

Odds: The odds of an event occurring is the ratio of the number of ways the event can occur (successes) to the number of ways the event cannot occur (failures).

Outlier: A value that is much greater or much less than the rest of the data is an outlier. More specifically, it is an element of a set of data that is 1.5 interquartile ranges greater than the upper quartile or less than the lower quartile.

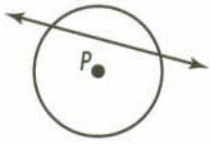
Polynomial: An algebraic expression that contains one or more monomials.

Quadratic function: Equations which are expressed in the form $y = ax^2 + bx + c$, where a is not equal to zero.

Rational number: A number that can be expressed as a ratio of two integers. A rational number can be expressed in the form a/b , where a and b are integers and b is not equal to zero.

Real number: The combined set of rational and irrational numbers.

Secant (of a circle): A line that intersects a circle in exactly two points.

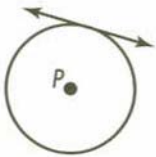


Semicircle: An arc of a circle whose endpoints are the endpoints of a diameter.

Slope: The ratio of the change in the vertical distance to the change in the horizontal distance of two points on a line. Slope measures the steepness of a line from left to right.

$$\text{Slope} = \frac{\text{change in } y}{\text{change in } x}, \text{ or } \frac{\text{rise}}{\text{run}}$$

Tangent (of a circle): A line that touches a circle in exactly one point.



Trinomial: A polynomial with three terms (e.g., $7a + 4b + 9c$).