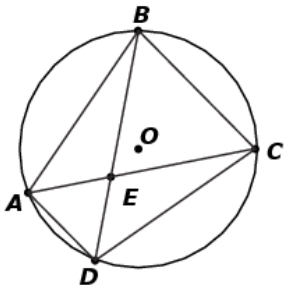
MAFS.912.G-C.1.3	Construct the inscribed and circumscribed circles of a triangle, and prove properties of angles for a quadrilateral inscribed in a circle.
Item Types	Editing Task Choice – May require choosing a step in construction or a property within an informal argument. Equation Editor – May require creating numerical values, expressions, or equations. GRID – May require creating a circle or ordering steps or properties. Hot Text – May require dragging text to complete a justification or to reorder steps. Matching Item – May require identifying properties of inscribed and circumscribed circles of a triangle. Multiple Choice – May require selecting a value or an expression from a list. Multiselect – May require selecting responses. Open Response – May require explaining the validity of a proof.
Clarifications	Students will construct a circle inscribed inside a triangle. Students will construct a circle circumscribed about a triangle. Students will solve problems using the properties of inscribed and circumscribed circles of a triangle. Students will use or justify properties of angles of a quadrilateral that is inscribed in a circle.
Assessment Limit	Items may include problems that use the incenter and circumcenter of a triangle.
Stimulus Attribute	Item may be set in real-world or mathematical context.
Response Attributes	Items may require the student to use or choose the correct unit of measure. Items may require the student to provide steps for a construction. Items may require the student to give statements and/or justifications to complete formal and informal proofs.
Calculator	Neutral

Sample Item	Item Type
	GRID – Hot Spot

Trapezoid *ABCD* is inscribed in circle *O*. Diagonals $\overline{BD}$ and $\overline{AC}$ meet at point *E* and $\overline{AD}$ is parallel to $\overline{BC}$, as shown.



Select the angles and value that make a true statement about trapezoid *ABCD*.