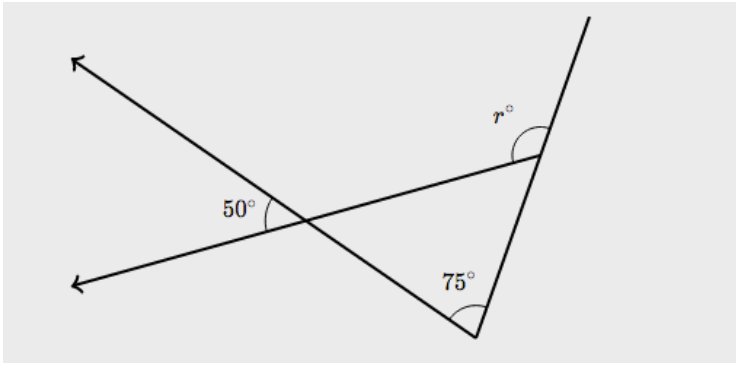
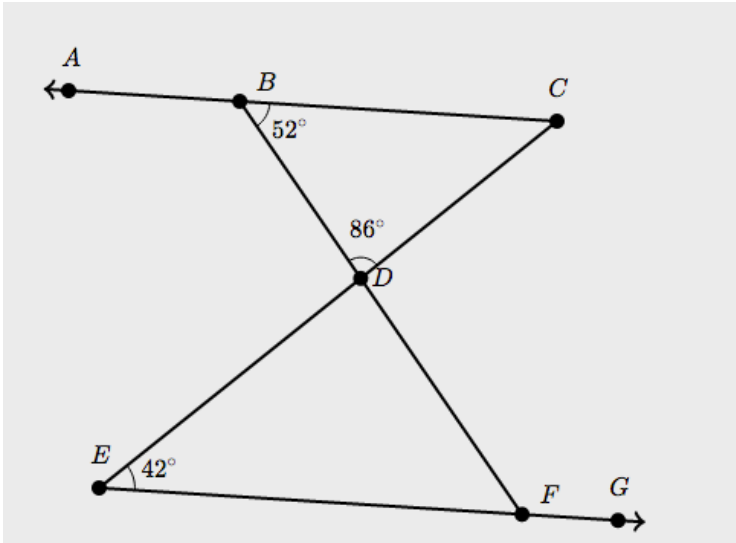


Congruence and similarity



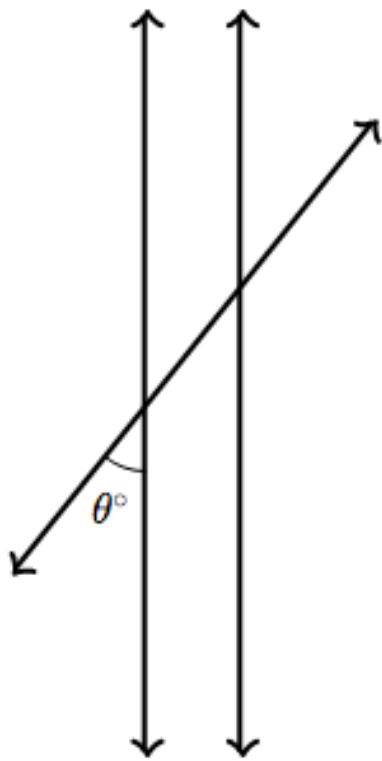
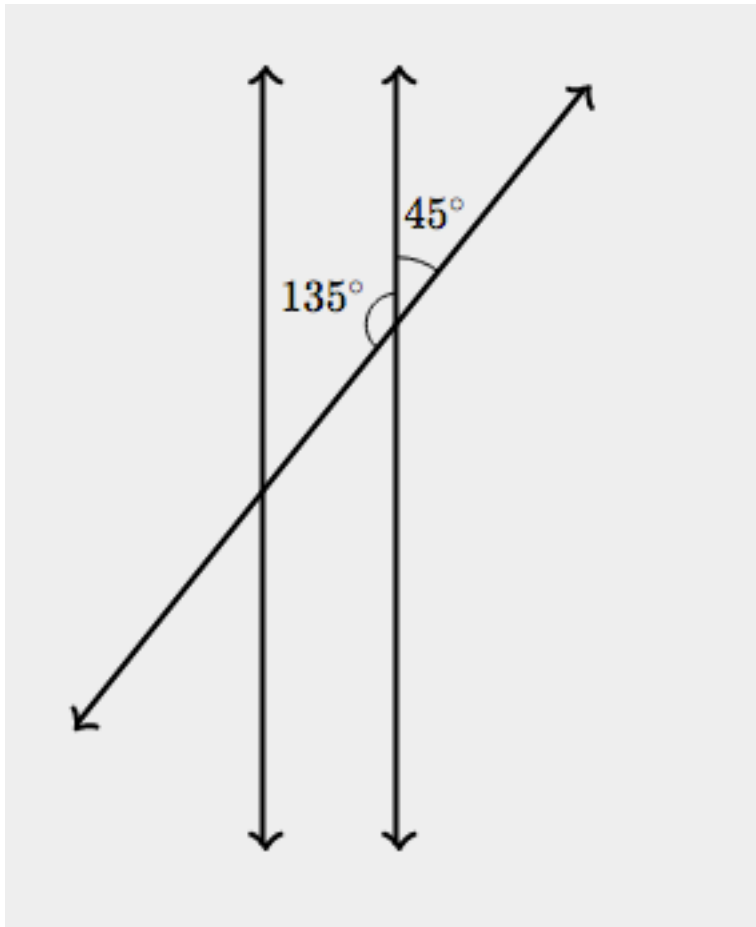
Given the angle measures in the figure at left, what is the value of r ?



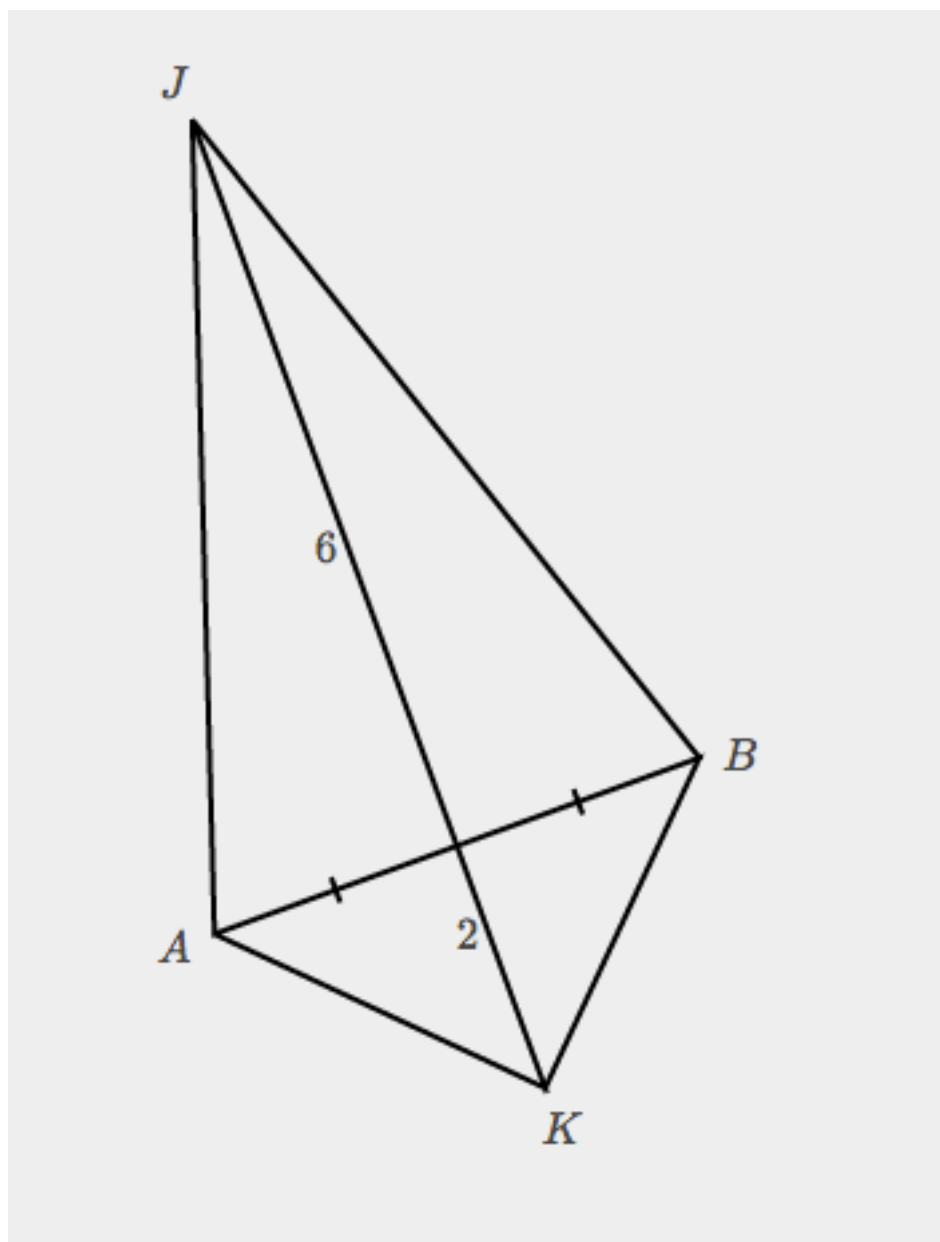
Given the figure at left, which of the following statements is true?

- (A) Triangle DEF is isosceles.
- (B) Rays \overrightarrow{CA} and \overrightarrow{EG} are parallel.
- (C) Segments \overline{CE} and \overline{BF} are perpendicular.
- (D) Angles $\angle BDC$ and $\angle EDF$ are supplementary.

Congruence and similarity

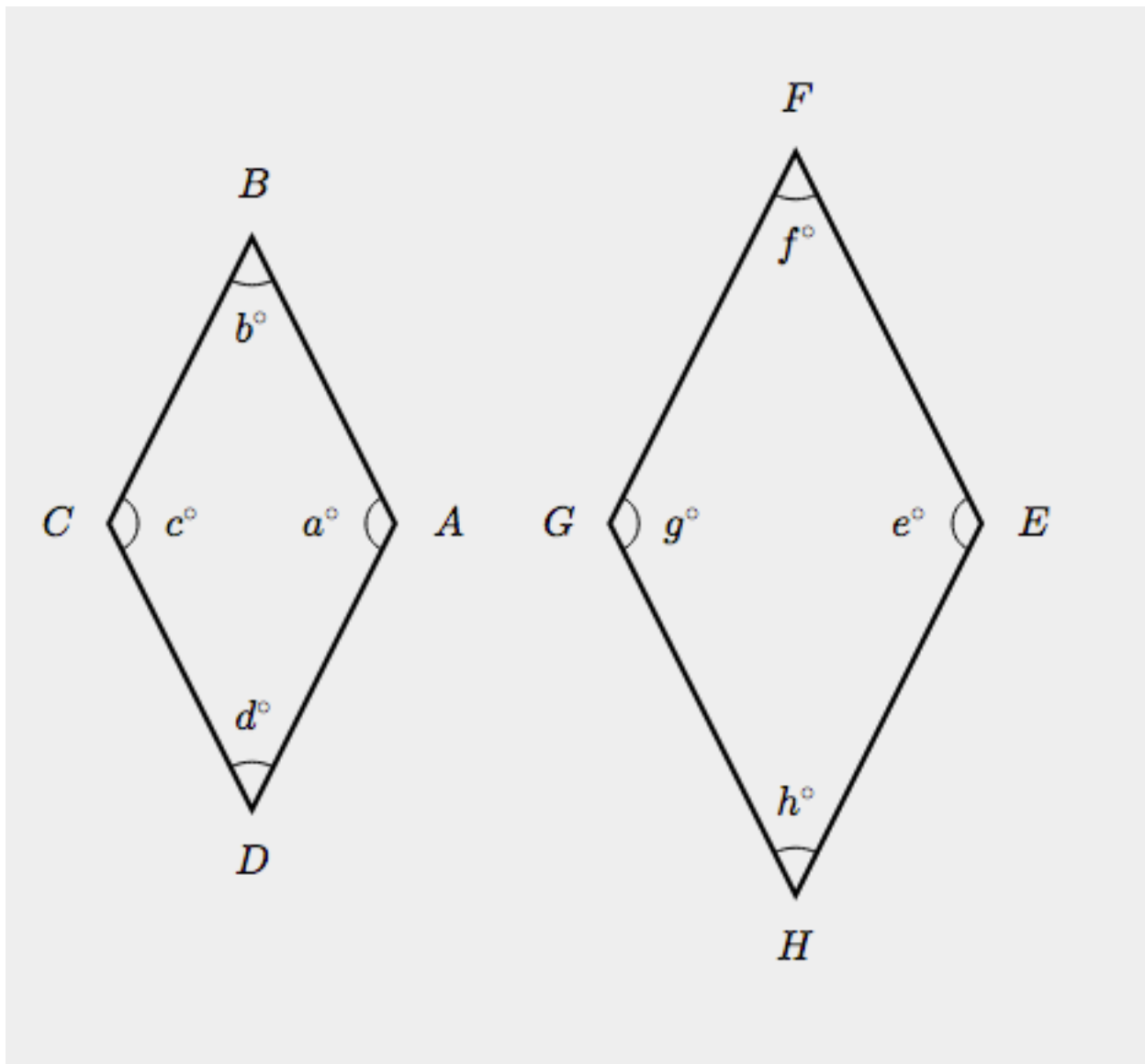


Two figures are shown above. The left figure has two vertical lines, and another line intersecting both. The right figure is similar to the left figure. What is the value of θ ?



The figure at left was made by first drawing line segment \overline{AB} , and then drawing \overline{JK} , which is a segment of the perpendicular bisector of \overline{AB} . Which of the following statements must be true?

- A Triangles AJB and AKB are isosceles.
- B Triangle AKB is isosceles, but triangle AJB is not.
- C Triangles AJB and AKB are congruent.
- D Triangles AJK and AJB are congruent.



In the figure at left, rhombus $ABCD$ is similar to rhombus $EFGH$. Which of the following must be true?

(A) $d^\circ = f^\circ$

(B) $d^\circ = g^\circ$

(C) $d^\circ = 90^\circ - g^\circ$

(D) $d^\circ = 180^\circ - f^\circ$