

Geometry

Unit: Introduction to Geometry

Section: Parallel and Perpendicular Lines

Flash Cards: Parallel Lines and Transversals

Directions: Answer the following questions using the diagram.

The diagram consists of parallel lines AB and CD, cut by transversal RS. Segment RS intersects segment AB at point E and segment CD at point F.

1. Name the angle that forms an alternate exterior angle pair with angle CFS
2. Which angle corresponds to angle EFD?
3. If angle AER equals 124 degrees, what is the measure of angle RFD?
4. If angle AEF equals 50 degrees, what is the measure of angle REB?

Answers:

1. The correct answer is angle REB, since both angles are on the outside of the parallel lines and they are on opposite sides of the transversal.
2. The correct answer is angle REB, since it is in the same place in relation to the point at which the transversal intersects the line. Both angles are above and to the right of the point of intersection.
3. The correct answer is 56 degrees. Angle CFD also measure 124 degrees since it corresponds with angle AER. Angle AER and angle RFD are supplementary, add up to 180 degrees.
4. The correct answer is 50 degrees, since it is a vertical angle with angle AEF. Vertical angles have equal measure.