

Draw a pair of parallel lines.

\overleftrightarrow{AB} \overleftrightarrow{CD}

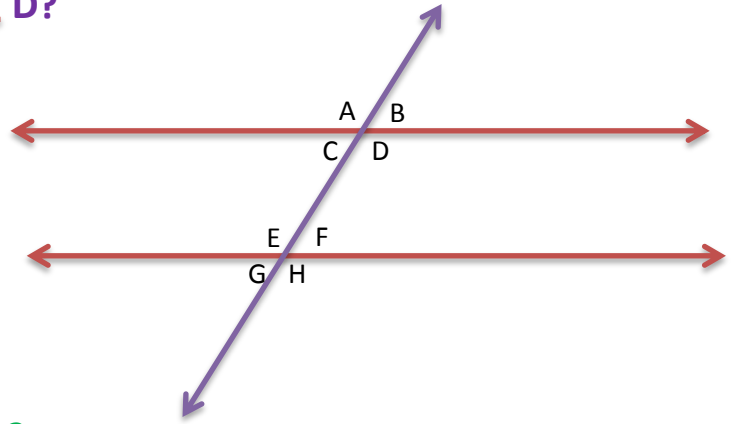
Draw transversal \overleftrightarrow{GH} intersecting the two parallel lines.

Measure all 8 angles created by drawing the transversal.

What do you notice?

Highlight all congruent angles the same color.

What do you know about $\angle A$ and $\angle D$?



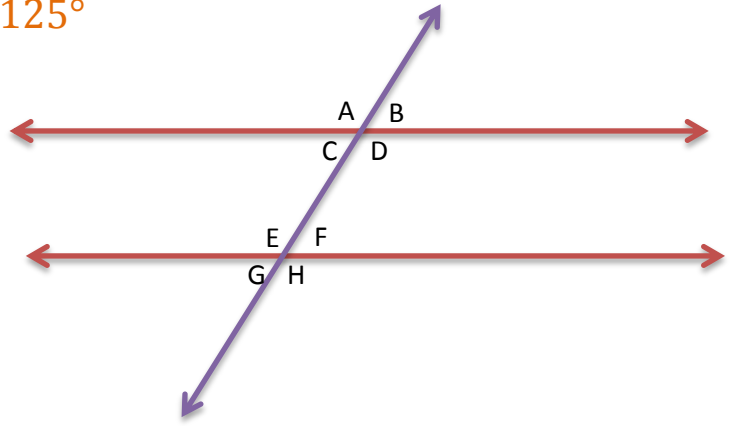
What do you know about $\angle H$ and $\angle D$?

What do you know about $\angle G$ and $\angle H$?

What do you know about $\angle E$ and $\angle B$?

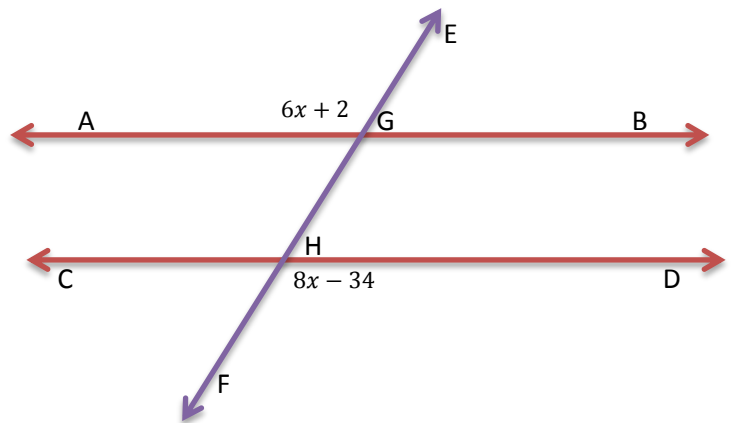
What do you know about $\angle B$ and $\angle G$?

Find the measure of all angles if $\angle D = 125^\circ$



Write an equation to show that

$$\angle AGE = \angle DHF$$

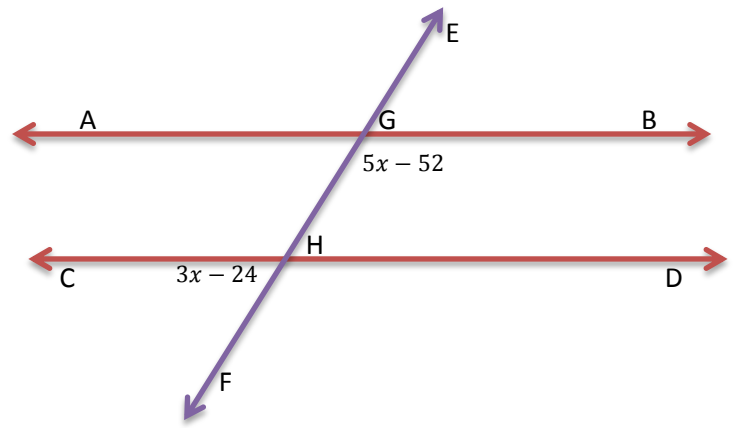


Solve the equation to find the value of x .

Use the value of x to find all missing angle measurements.

Write an equation to show that

$\angle BGH$ and $\angle CHF$ are supplementary.



Solve the equation to find the value of x .

Use the value of x to find all missing angle measurements.

Find the each angle measurement.

