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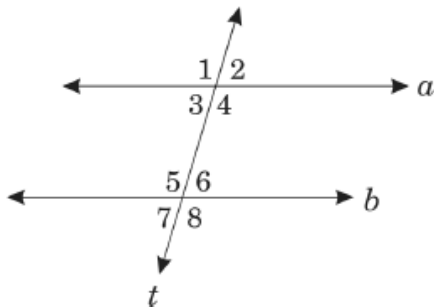
Mastery Quiz

Date:
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Study Guide

Grade Yourself

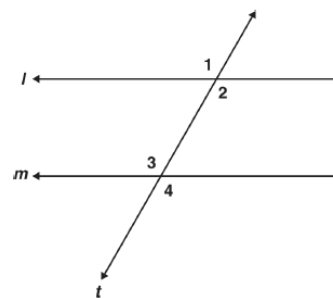
In this figure, line a is parallel to line b .



If the measure of $\angle 3$ is 68° , what is the measure of $\angle 6$?

- A. 22° B. 32° C. 68° D. 112°

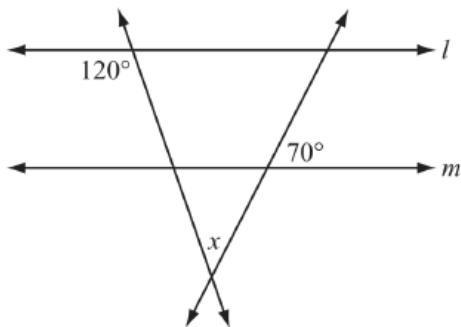
In the diagram below, $\angle 1 \cong \angle 4$.



Which of the following conclusions does not have to be true?

- A. $\angle 3$ and $\angle 4$ are supplementary angles.
 B. Line l is parallel to line m .
 C. $\angle 1 \cong \angle 3$
 D. $\angle 2 \cong \angle 3$

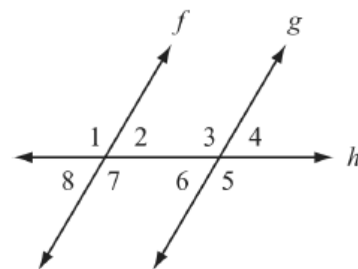
Line l is parallel to line m . Two transversals intersect lines l and m , as shown in the diagram below.



Based on the angle measures in the diagram, what is x ?

- A. 40° B. 50° C. 60° D. 70°

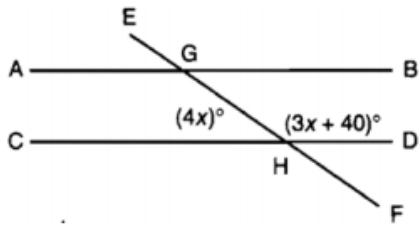
In the diagram below, line h is a transversal of lines f and g .



Which of the following relationships proves that lines f and g are parallel?

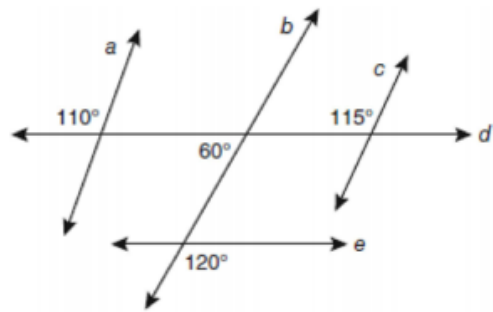
- A. $\angle 1 \cong \angle 4$ B. $\angle 1 \cong \angle 5$
 C. $\angle 1 \cong \angle 6$ D. $\angle 1 \cong \angle 7$

In the diagram below, \overline{AB} is parallel to \overline{CD} . Transversal \overline{EF} intersects \overline{AB} and \overline{CD} at G and H , respectively. If $m\angle AGH = 4x$ and $m\angle GHD = 3x + 40$, what is the value of x ?



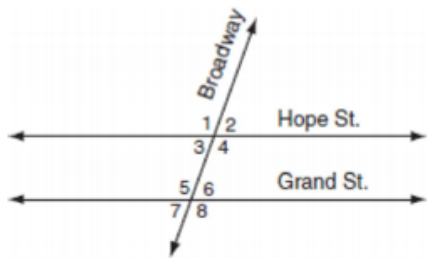
- 1) 20
- 2) 40
- 3) 80
- 4) 160

Based on the diagram below, which statement is true?



- 1) $a \parallel b$
- 2) $a \parallel c$
- 3) $b \parallel c$
- 4) $d \parallel e$

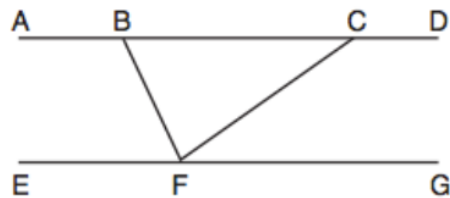
The accompanying diagram shows two parallel roads, Hope Street and Grand Street, crossed by a transversal road, Broadway.



If $m\angle 1 = 110$, what is the measure of $m\angle 7$?

- 1) 40°
- 2) 70°
- 3) 110°
- 4) 180°

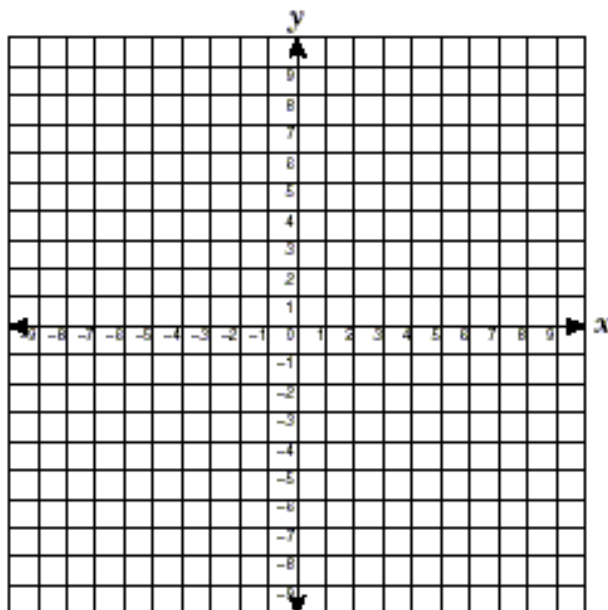
Line segments \overline{AD} , \overline{EG} , \overline{BF} , and \overline{CF} as shown in the diagram below. Scalene triangle BFC is formed.



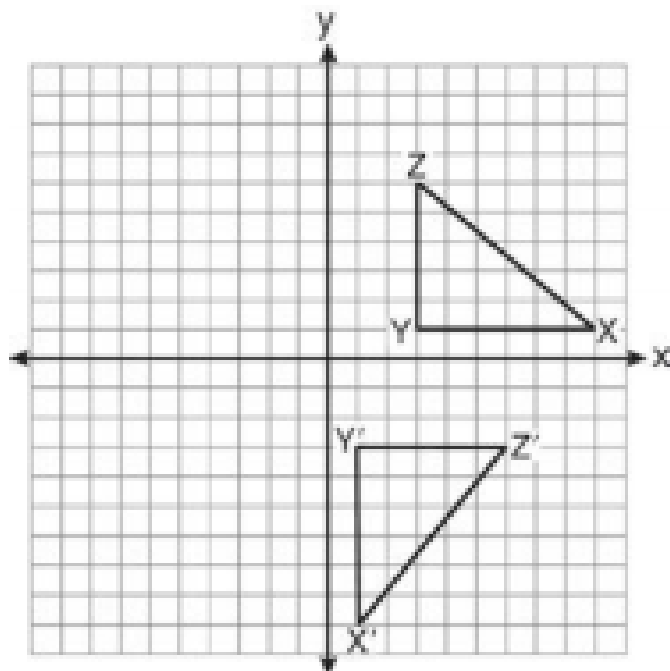
Which statement will allow you to prove $\overline{AD} \parallel \overline{EG}$?

- (1) $\angle CFG + \angle FCB = 180$
- (2) $\angle EFB = \angle CFB$
- (3) $\angle ABF = \angle BFC$
- (4) $\angle ABF + \angle EFB = 180$

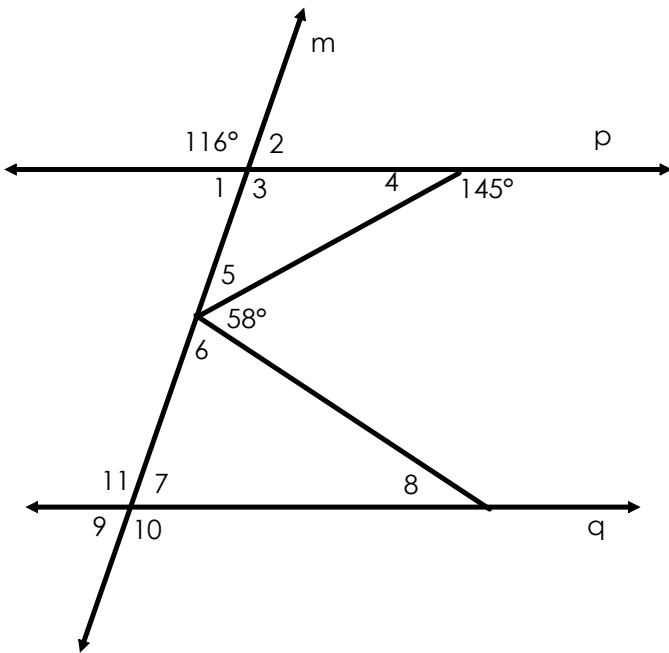
Given: quadrilateral $ABCD$ with vertices $A(-2,2)$, $B(8,-4)$, $C(6,-10)$, and $D(-4,-4)$. State the coordinates of $A'B'C'D'$, the image of quadrilateral $ABCD$ under a dilation of factor $\frac{1}{2}$ centered at $(0,-2)$



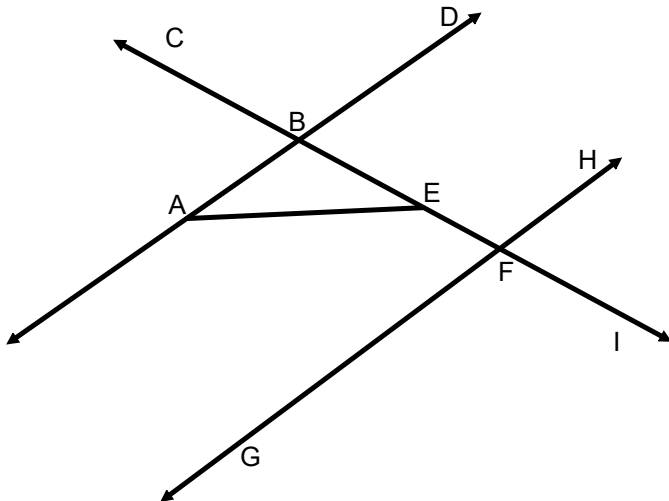
Describe a sequence of rigid motions that maps triangle XYZ onto triangle $X'Y'Z'$



Line m is the transversal for lines p and q . If $p \parallel q$, find in all the missing angles and justify your answers.



In the diagram below, \overline{CI} is the transversal of \overline{AD} and \overline{GH} . The $m\angle BAE = 37^\circ$, the $m\angle HFI = 74^\circ$, and $AB \cong BE$. Prove $AD \parallel GH$. Explain your reasoning.

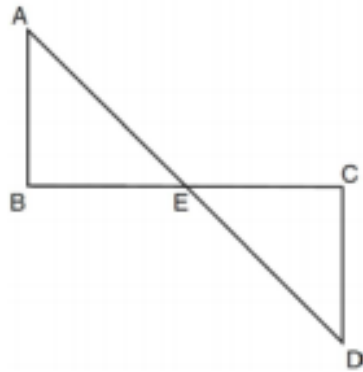


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Given: \overline{AD} bisects \overline{BC} at E .

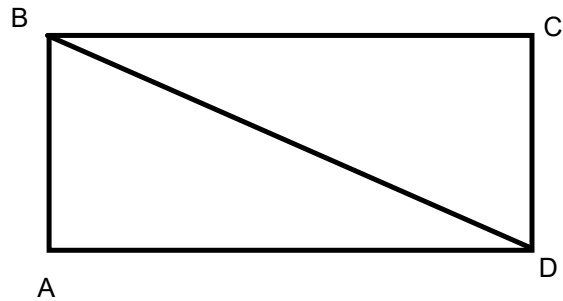
$AB \parallel CD$

Prove: $\overline{AB} \cong \overline{DC}$



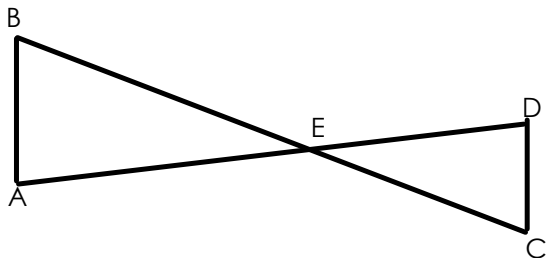
Given: $\overline{AD} \parallel \overline{BC}$, $\overline{BA} \perp \overline{AD}$, and $\overline{BC} \perp \overline{CD}$

Prove $\overline{AD} \cong \overline{BC}$



Given: $\overline{AB} \parallel \overline{CD}$ and $\overline{BA} \cong \overline{DC}$

Prove: $\triangle BAE \cong \triangle CDA$



On a scale of 1 - 10, circle how confident you feel that you will pass this test

No Confidence

I GOT THIS

1 2 3 4 5 6 7 8 9 10

Name 5 resources you can use to study for this exam.

1: _____

2: _____

3: _____

4: _____

5: _____

What I totally understand

What I need to study more