Lesson 3.7 Parallel Lines & Transversals

Wednesday, November 1, 2023 9:48 PM

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Lesson 3.7 Parallel

Lesson 3.7 Parallel Lines and Transversals

Workbook pages 181-186

Florida's B.E.S.T. Standards for Mathematics

Workbook pages 181-186

Florida's B.E.S.T. Standards for Mathematics

MA.912.GR.1.1

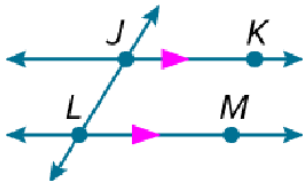
Prove relationships and theorems about lines and angles. Solve mathematical and real-world problems involving postulates, relationships and theorems of lines and angles.

Content Objective

Students identify and use relationships between parallel lines and transversals.

Parallel lines are coplanar lines that do not intersect.

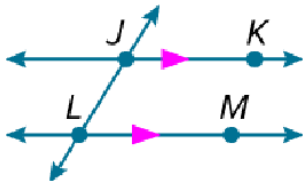
Example $\overleftrightarrow{JK} \parallel \overleftrightarrow{LM}$



between parallel lines and transversals.

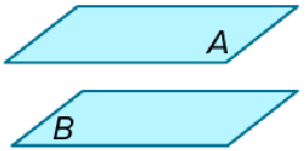
that do not intersect.

Example $\overleftrightarrow{JK} \parallel \overleftrightarrow{LM}$



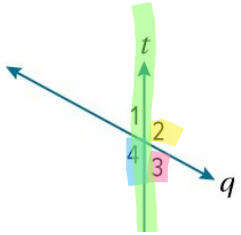
Parallel planes are planes that do not intersect.

Example Planes $\mathcal{A}$ and $\mathcal{B}$ are parallel.



Learn

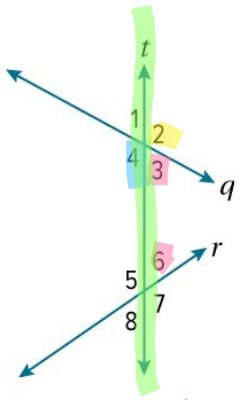
Parallel Lines and Transversals: A line that intersects two or more lines in a plane at different points is called a **transversal**.

Transversal Angle Pair Relationships		
Four **interior angles** lie in the region between lines q and r.	$\angle 3$, $\angle 4$, $\angle 5$, $\angle 6$	
Four **exterior angles** lie in the two regions that are not	$\angle 1$, $\angle 2$, $\angle 7$, $\angle 8$	

t is a transversal of lines q and r

Learn

Parallel Lines and Transversals: A line that intersects two or more lines in a plane at different points is called a **transversal**.

Transversal Angle Pair Relationships		
Four **interior angles** lie in the region between lines q and r.	∠3, ∠4, ∠5, ∠6	
Four **exterior angles** lie in the two regions that are not between lines q and r.	∠1, ∠2, ∠7, ∠8	
Consecutive interior angles are interior angles that lie on the same side of transversal t.	∠4 and ∠5, ∠3 and ∠6	
Alternate exterior angles are nonadjacent exterior angles that lie on opposite sides of transversal t.	∠1 and ∠7, ∠2 and ∠8	

t is a transversal of lines q and r

Students, draw anywhere on this slide!
Pear Deck Interactive Slide
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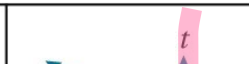
Learn

Parallel Lines and Transversals

Transversal Angle Pair Relationships		
Corresponding angles lie on	∠1 and ∠5,	

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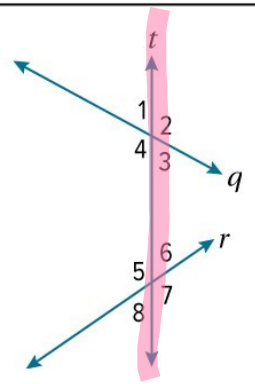
Parallel Lines and Transversals

Transversal Angle Pair Relationships		
Corresponding angles lie on the same side of transversal t and on the same side of lines q and r.	∠1 and ∠5, ∠2 and ∠6, ∠3 and ∠7, ∠4 and ∠8	

b. all lines parallel to $\overleftrightarrow{FG}$ or $\overleftrightarrow{EH}$

$\overleftrightarrow{FG}$ or $\overleftrightarrow{CD}$

c. all planes parallel to plane *DCH*

plane ABG or plane FAB