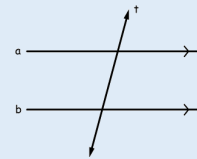


# The Common Denominator



A Family Math Newsletter

Math 8 Unit 6: Measurement Geometry

## Unit at a Glance

### Skills/ Topics:

- Establish facts about the angles formed when parallel lines are cut by a transversal.
- Establish facts about the angle sum and exterior angle of triangles, and the angle-angle criterion for similarity of triangles.
- Explain a proof of the Pythagorean Theorem and its converse.
- Apply the Pythagorean Theorem to determine unknown side lengths in right triangles.
- Apply the Pythagorean Theorem to find distance between points in a coordinate plane.



**Length:** 17 Days (45 minutes); 8 Days (90 minutes)

## Exploring Mathematics

You are locked out of your house and the only open window is on the second floor, 20 feet above the ground. You need to borrow a ladder from one of your neighbors. There is a bush along the edge of the house, so you will have to place the ladder 15 feet from the house.

What length of ladder do you need to reach the window?



## Resource Toolkit

### HMH Resources

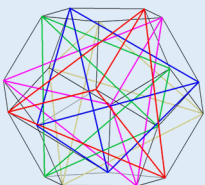
Module 11: Angle Relationships in Parallel Lines and Triangles pg. 343-370  
 Module 12: The Pythagorean Theorem pg. 371-394

### Discovery ED Techbook Info

Grade 8  
 The Pythagorean Theorem, Concept 4.1, 4.2 and 4.3  
 Intersecting Lines and Angles, Concept 6.1 and 6.2

### HW Help Section

**Khan Academy**  
[Parallel Lines](#), [Pythagorean Theorem](#), [Distance Formula](#)



Where there is matter, there is geometry.

Johannes Kepler