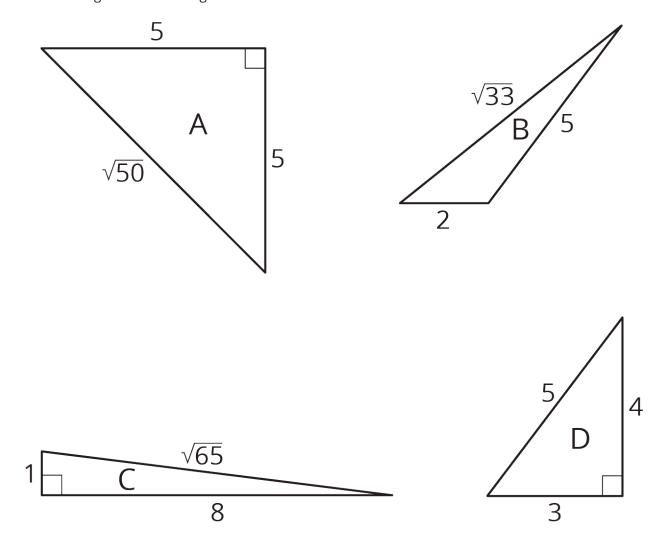
# **Unit 8 Lesson 5: Finding Side Lengths of Triangles**

## 1 Which One Doesn't Belong: Triangles (Warm up)

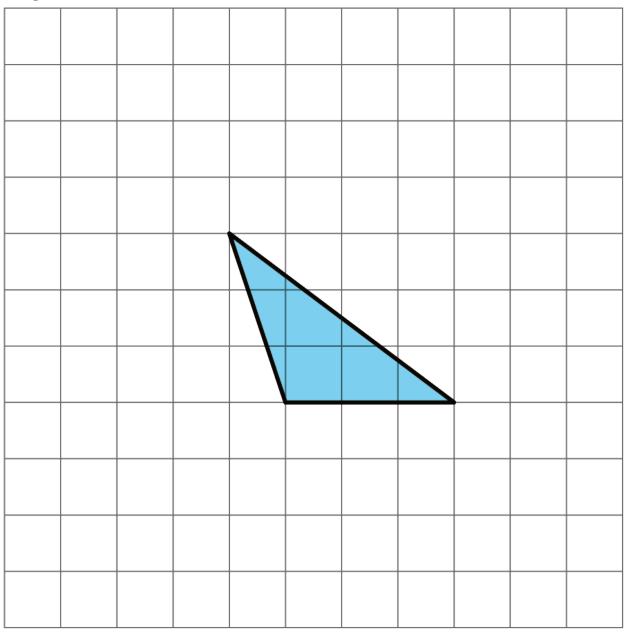
#### **Student Task Statement**

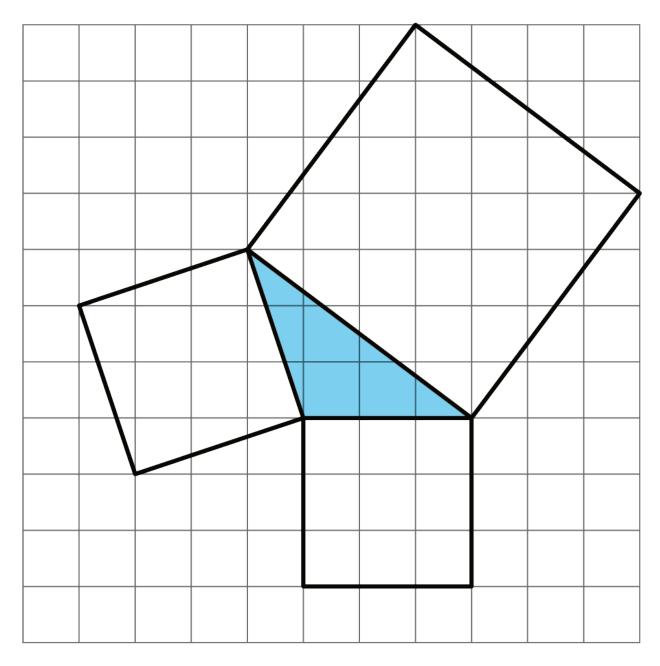
Which triangle doesn't belong?



## 2 A Table of Triangles

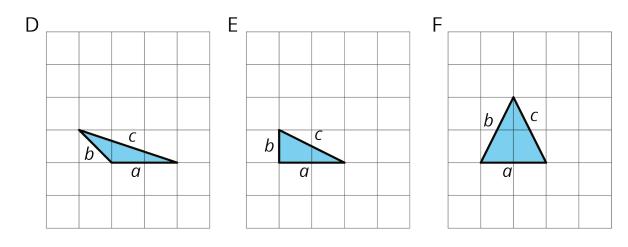
Images for Launch





#### **Student Task Statement**

1. Complete the tables for these three triangles:

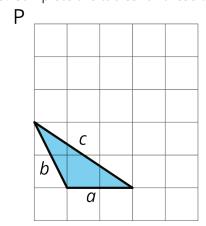


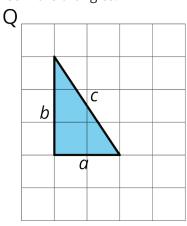
triangle	а	b	c
D			
E			
F			

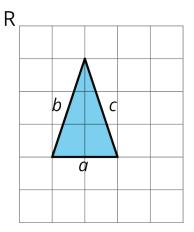
triangle	$a^2$	$b^2$	$c^2$
D			
E			
F			

2. What do you notice about the values in the table for Triangle E but not for Triangles D and F?

3. Complete the tables for these three more triangles:







triangle	а	b	c
Р			
Q			
R			

triangle	$a^2$	$b^2$	$c^2$
Р			
Q			
R			

- 4. What do you notice about the values in the table for Triangle Q but not for Triangles P and R?
- 5. What do Triangle E and Triangle Q have in common?

### **3 Meet the Pythagorean Theorem**

#### **Student Task Statement**

- 1. Find the missing side lengths. Be prepared to explain your reasoning.
- 2. For which triangles does  $a^2 + b^2 = c^2$ ?

