

**PRACTICE: LESSON 7.1 – PYTHAGOREAN THEOREM:** Identify and Calculate the **Hypotenuse (c)** Name: \_\_\_\_\_

**Learning Goal:** I can identify which side of a right triangle is the **hypotenuse** and I can use Pythagorean Theorem to calculate the length of the **hypotenuse**.

**Meta de Aprendizaje:** Puedo identificar qué lado de un triángulo derecho es la **hipotenusa** y puedo usar el teorema de Pitágoras para calcular la longitud de la **hipotenusa**.

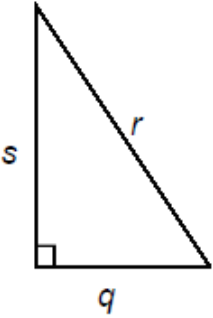
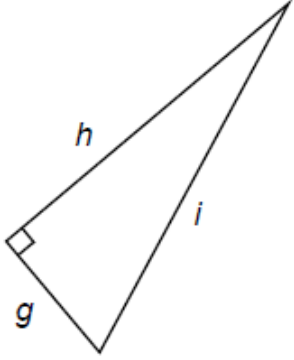
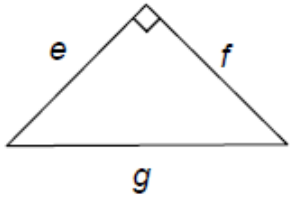
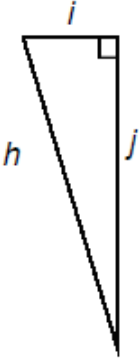
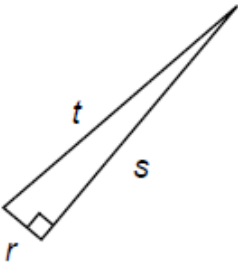
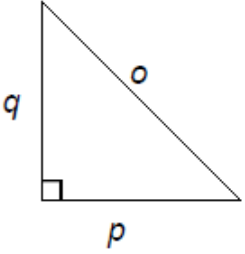
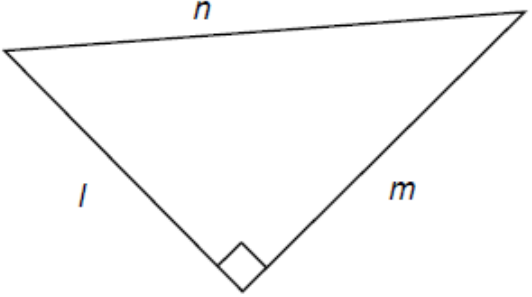
**Language Goal:** I can discuss with a partner how to determine the **hypotenuse** of a right triangle and write our explanation.

**Lenguaje Objetivo:** Puedo discutir con un compañero cómo determinar la **hipotenusa** de un triángulo rectángulo y escribir nuestra explicación.

**DIRECTIONS:** Answer the following questions about Pythagorean Theorem.

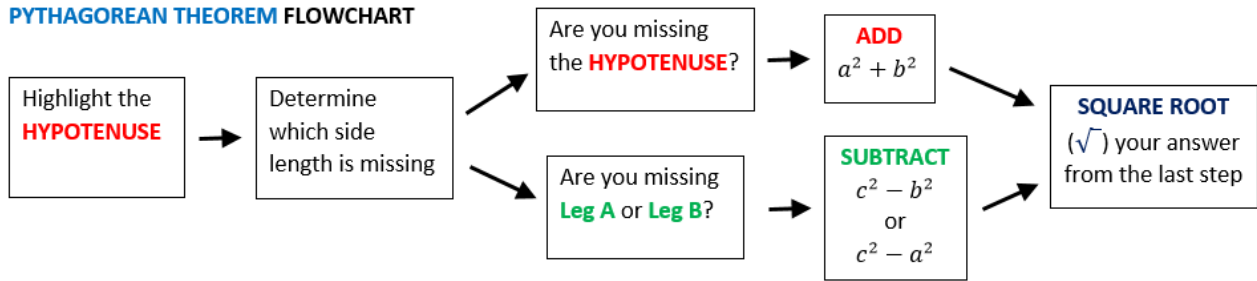
1. **Pythagorean Theorem** is only used on right triangles. **TRUE** or **FALSE**  
(*El teorema de Pitágoras sólo se usa en triángulos rectos.*)
  
2. The **hypotenuse** is the longest side of a right triangle. **TRUE** or **FALSE**  
(*La hipotenusa es el lado más largo de un triángulo rectángulo.*)
  
3. The letter “c” represents the **hypotenuse**. **TRUE** or **FALSE**  
(*La letra “c” representa la hipotenusa.*)

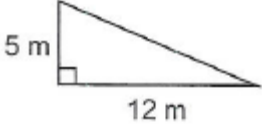
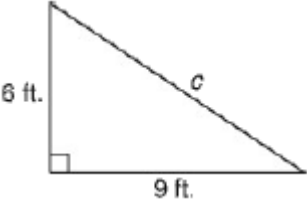
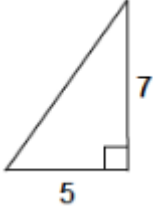
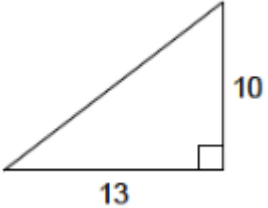
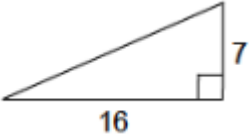
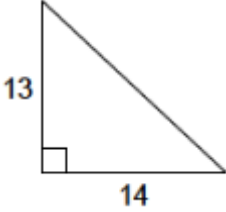
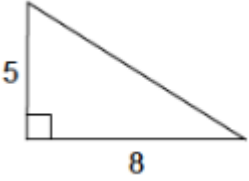
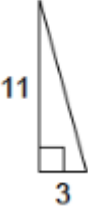
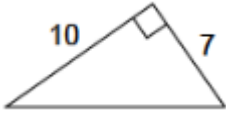
**DIRECTIONS:** Highlight the **hypotenuse** and label it “c”. (*Resalte la hipotenusa y etiquete “c”.*)

<p><b>1</b></p> 	<p><b>2</b></p> 	<p><b>3</b></p> 	<p><b>4</b></p> 
<p><b>5</b></p> 	<p><b>6</b></p> 	<p><b>7</b></p> 	

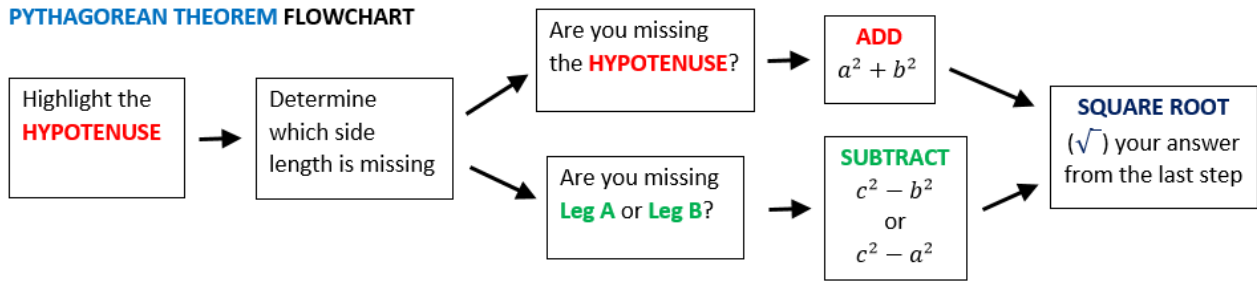
**DIRECTIONS:** Calculate the length of the **hypotenuse**. Use the flowchart if necessary.  
*(Calcular la longitud de la **hipotenusa**. Utilice el diagrama de flujo si es necesario.)*

**PYTHAGOREAN THEOREM FLOWCHART**

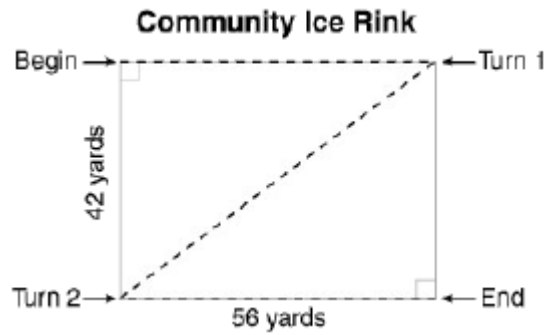


<p>1. Find the missing side length.</p> 	<p>2. What is the length of side c? Round to the nearest tenth.</p> 	<p>3. Find the missing side length. Round to the nearest tenth.</p> 
<p>4. What is the length of the hypotenuse? Round to the nearest tenth.</p> 	<p>5. Find the missing side length. Round to the nearest whole number.</p> 	<p>6. What is the length of side c? Round to the nearest tenth.</p> 
<p>7. What is the length of the missing side? Round to the nearest whole number.</p> 	<p>8. What is the length of side c? Round to the nearest tenth.</p> 	<p>9. Find the length of the hypotenuse. Round to the nearest hundredth.</p> 

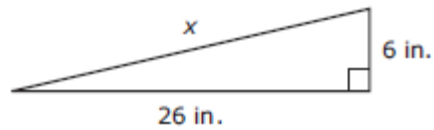
**PYTHAGOREAN THEOREM FLOWCHART**



10. What is the distance from Turn 1 to Turn 2?

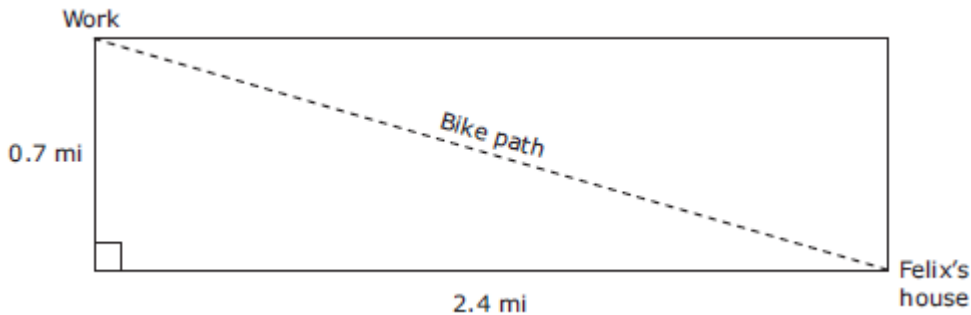


11. The diagram below shows the side view of a bike ramp.

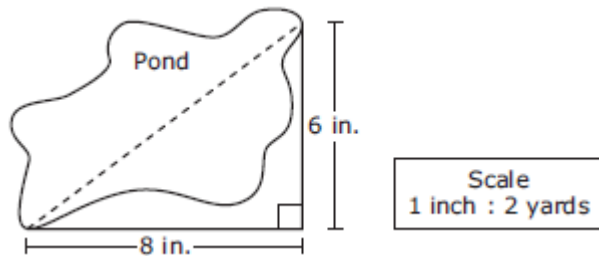


What is the approximate length of the bike ramp?

12. What is the length of the bike path from Felix's house to his work?



13. In the drawing below, the dashed line segment represents the distance across a pond.

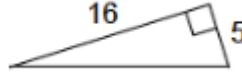


What is the actual distance, *in yards*, across the pond?

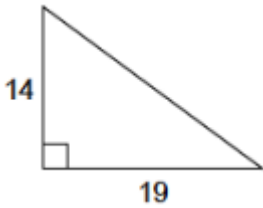
14. What is the length of the hypotenuse? Round to the nearest thousandth.



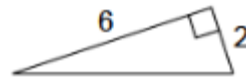
15. What is the length of the missing side? Round to the nearest tenth.



16. Find the length of side c. Round to the nearest whole number.



17. Find the length of the missing side. Round to the nearest hundredth.



**DIRECTIONS:** Answer the following questions in complete sentences. (*Responda las siguientes preguntas en oraciones completas. Puedes escribir en español si lo prefieres.*)

18. How do you know which side is the **hypotenuse**? (*¿Cómo sabes de qué lado es la **hipotenusa**?*)

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19. How do you calculate the **hypotenuse**? (*¿Cómo se calcula la **hipotenusa**?*)

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