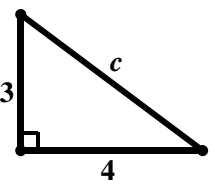
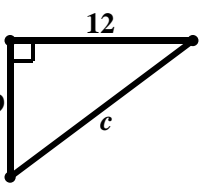
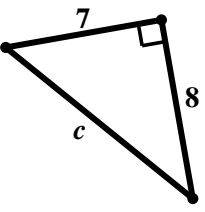
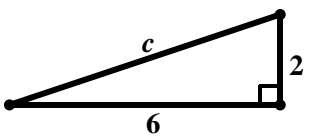
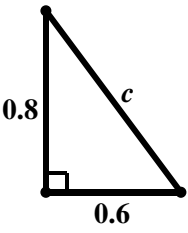
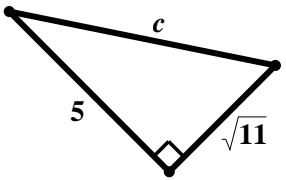


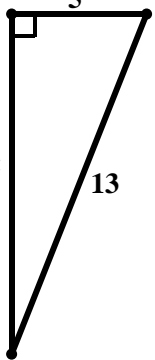
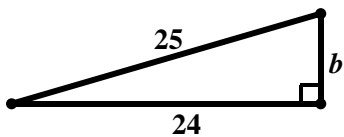
## 10.2c Class Activity: The Pythagorean Theorem and Unknown Side Lengths

**Directions:** Find the length of the hypotenuse of each right triangle shown below using the Pythagorean Theorem. Leave your answer in simplest radical form.

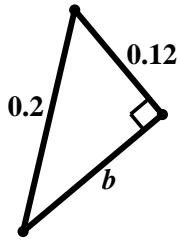


<p>1.</p>  <p><math>c = \underline{\hspace{2cm}}</math></p>	<p>2.</p>  <p><math>c = \underline{\hspace{2cm}}</math></p>
<p>3.</p>  <p><math>c = \underline{\hspace{2cm}}</math></p>	<p>4.</p>  <p><math>c = \underline{\hspace{2cm}}</math></p>
<p>5.</p>  <p><math>c = \underline{\hspace{2cm}}</math></p>	<p>6.</p>  <p><math>c = \underline{\hspace{2cm}}</math></p>

**Directions:** Find the length of the leg of each right triangle shown below using the Pythagorean Theorem. Leave your answer in simplest radical form.

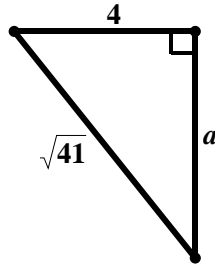
<p>7.</p>  <p><math>a = \underline{\hspace{2cm}}</math></p>	<p>8.</p>  <p><math>b = \underline{\hspace{2cm}}</math></p>
--	---

9.



$b = \underline{\hspace{2cm}}$

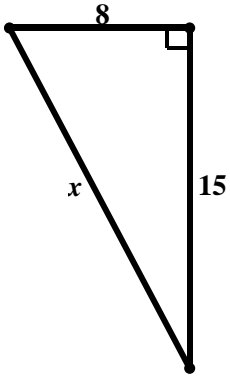
10.



$a = \underline{\hspace{2cm}}$

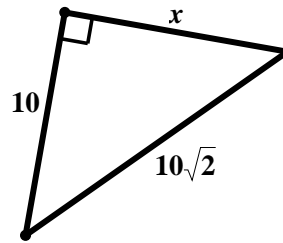
**Directions:** Find the value of  $x$  using the Pythagorean Theorem. Leave your answer in simplest radical form.

11.



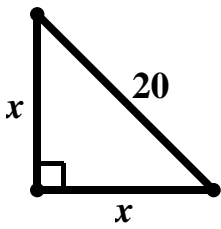
$x = \underline{\hspace{2cm}}$

12.



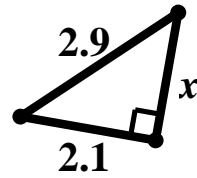
$x = \underline{\hspace{2cm}}$

13.



$x = \underline{\hspace{2cm}}$

14.



$x = \underline{\hspace{2cm}}$