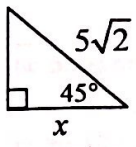
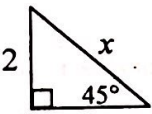
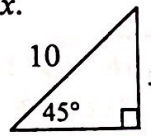


















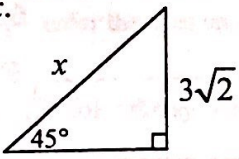
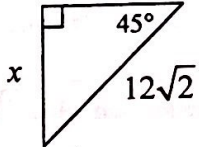
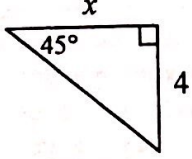


















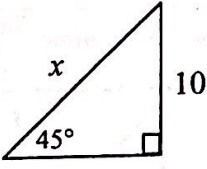
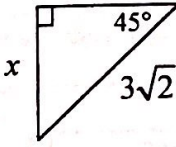
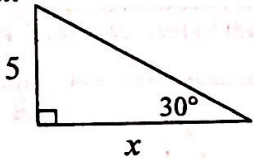


















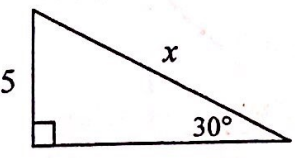
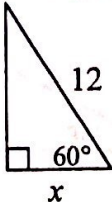
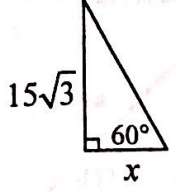

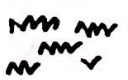

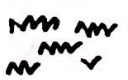
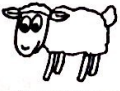

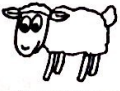






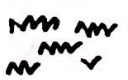
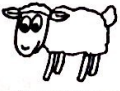





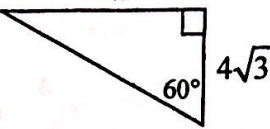
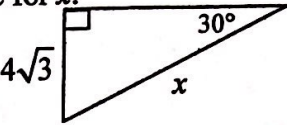
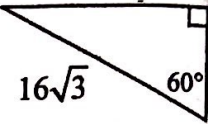
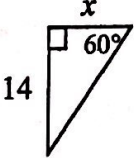
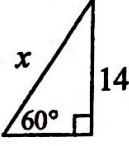
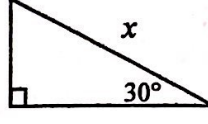
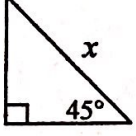
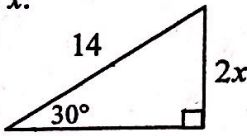
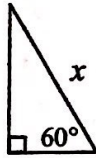
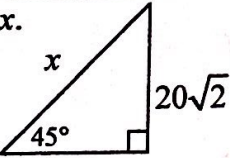
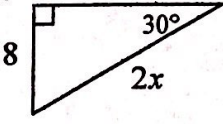

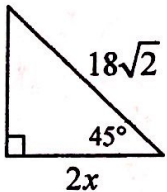
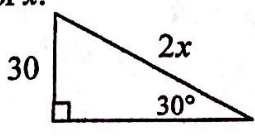
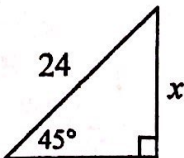
## Lesson 18: Special Right Triangles

**Directions:** Solve each problem and use a pencil to **DRAW** the object that corresponds with your answer. **SHOW YOUR STEPS!!!**

<p>1. Solve for <math>x</math>.</p> 	<p>2. Solve for <math>x</math>.</p> 	<p>3. Solve for <math>x</math>.</p> 												
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%;">(a) If <math>x = 5</math> draw the following hat on the head.</td> <td style="text-align: center;"></td> </tr> <tr> <td>(b) If <math>x = 5\sqrt{2}</math> draw the following hat on the head.</td> <td style="text-align: center;"></td> </tr> </table>	(a) If $x = 5$ draw the following hat on the head.		(b) If $x = 5\sqrt{2}$ draw the following hat on the head.		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%;">(a) If <math>x = 4</math> draw the following ears.</td> <td style="text-align: center;"></td> </tr> <tr> <td>(b) If <math>x = 2\sqrt{2}</math> draw the following ears.</td> <td style="text-align: center;"></td> </tr> </table>	(a) If $x = 4$ draw the following ears.		(b) If $x = 2\sqrt{2}$ draw the following ears.		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%;">(a) If <math>x = 5\sqrt{2}</math> draw the following hair around the ears.</td> <td style="text-align: center;"></td> </tr> <tr> <td>(b) If <math>x = 10\sqrt{2}</math> draw the following hair around the ears.</td> <td style="text-align: center;"></td> </tr> </table>	(a) If $x = 5\sqrt{2}$ draw the following hair around the ears.		(b) If $x = 10\sqrt{2}$ draw the following hair around the ears.	
(a) If $x = 5$ draw the following hat on the head.														
(b) If $x = 5\sqrt{2}$ draw the following hat on the head.														
(a) If $x = 4$ draw the following ears.														
(b) If $x = 2\sqrt{2}$ draw the following ears.														
(a) If $x = 5\sqrt{2}$ draw the following hair around the ears.														
(b) If $x = 10\sqrt{2}$ draw the following hair around the ears.														
<p>4. Solve for <math>x</math>.</p> 	<p>5. Solve for <math>x</math>.</p> 	<p>6. Solve for <math>x</math>.</p> 												
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%;">(a) If <math>x = 6</math> draw the following eyes.</td> <td style="text-align: center;"></td> </tr> <tr> <td>(b) If <math>x = 3</math> draw the following eyes.</td> <td style="text-align: center;"></td> </tr> </table>	(a) If $x = 6$ draw the following eyes.		(b) If $x = 3$ draw the following eyes.		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%;">(a) If <math>x = 6\sqrt{2}</math> draw the following eyebrows.</td> <td style="text-align: center;"></td> </tr> <tr> <td>(b) If <math>x = 12</math> draw the following eyebrows.</td> <td style="text-align: center;"></td> </tr> </table>	(a) If $x = 6\sqrt{2}$ draw the following eyebrows.		(b) If $x = 12$ draw the following eyebrows.		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%;">(a) If <math>x = 4</math> draw the following nose, mustache, and mouth.</td> <td style="text-align: center;"></td> </tr> <tr> <td>(b) If <math>x = 4\sqrt{2}</math> draw the following nose, mustache, and mouth.</td> <td style="text-align: center;"></td> </tr> </table>	(a) If $x = 4$ draw the following nose, mustache, and mouth.		(b) If $x = 4\sqrt{2}$ draw the following nose, mustache, and mouth.	
(a) If $x = 6$ draw the following eyes.														
(b) If $x = 3$ draw the following eyes.														
(a) If $x = 6\sqrt{2}$ draw the following eyebrows.														
(b) If $x = 12$ draw the following eyebrows.														
(a) If $x = 4$ draw the following nose, mustache, and mouth.														
(b) If $x = 4\sqrt{2}$ draw the following nose, mustache, and mouth.														
<p>7. Solve for <math>x</math>.</p> 	<p>8. Solve for <math>x</math>.</p> 	<p>9. Solve for <math>x</math>.</p> 												
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%;">(a) If <math>x = 10\sqrt{2}</math> draw the following vest.</td> <td style="text-align: center;"></td> </tr> <tr> <td>(b) If <math>x = 20</math> draw the following vest.</td> <td style="text-align: center;"></td> </tr> </table>	(a) If $x = 10\sqrt{2}$ draw the following vest.		(b) If $x = 20$ draw the following vest.		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%;">(a) If <math>x = 3</math> draw a star on the vest.</td> <td style="text-align: center;"></td> </tr> <tr> <td>(b) If <math>x = 6\sqrt{2}</math> draw a badge on the vest.</td> <td style="text-align: center;"></td> </tr> </table>	(a) If $x = 3$ draw a star on the vest.		(b) If $x = 6\sqrt{2}$ draw a badge on the vest.		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%;">(a) If <math>x = 5\sqrt{3}</math> draw a fence in the background.</td> <td style="text-align: center;"></td> </tr> <tr> <td>(b) If <math>x = 10</math> draw mountains in the background.</td> <td style="text-align: center;"></td> </tr> </table>	(a) If $x = 5\sqrt{3}$ draw a fence in the background.		(b) If $x = 10$ draw mountains in the background.	
(a) If $x = 10\sqrt{2}$ draw the following vest.														
(b) If $x = 20$ draw the following vest.														
(a) If $x = 3$ draw a star on the vest.														
(b) If $x = 6\sqrt{2}$ draw a badge on the vest.														
(a) If $x = 5\sqrt{3}$ draw a fence in the background.														
(b) If $x = 10$ draw mountains in the background.														
<p>10. Solve for <math>x</math>.</p> 	<p>11. Solve for <math>x</math>.</p> 	<p>12. Solve for <math>x</math>.</p> 												
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%;">(a) If <math>x = 5\sqrt{3}</math> draw bushes below the fence/mountains.</td> <td style="text-align: center;"></td> </tr> <tr> <td>(b) If <math>x = 10</math> draw tufts of grass below the fence/mountains.</td> <td style="text-align: center;"></td> </tr> </table>	(a) If $x = 5\sqrt{3}$ draw bushes below the fence/mountains.		(b) If $x = 10$ draw tufts of grass below the fence/mountains.		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%;">(a) If <math>x = 4\sqrt{3}</math> draw a sheep in the background.</td> <td style="text-align: center;"></td> </tr> <tr> <td>(b) If <math>x = 6</math> draw the back end of a horse in the background.</td> <td style="text-align: center;"></td> </tr> </table>	(a) If $x = 4\sqrt{3}$ draw a sheep in the background.		(b) If $x = 6$ draw the back end of a horse in the background.		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%;">(a) If <math>x = 15</math> draw a boot in the background.</td> <td style="text-align: center;"></td> </tr> <tr> <td>(b) If <math>x = 45</math> draw a belt in the background.</td> <td style="text-align: center;"></td> </tr> </table>	(a) If $x = 15$ draw a boot in the background.		(b) If $x = 45$ draw a belt in the background.	
(a) If $x = 5\sqrt{3}$ draw bushes below the fence/mountains.														
(b) If $x = 10$ draw tufts of grass below the fence/mountains.														
(a) If $x = 4\sqrt{3}$ draw a sheep in the background.														
(b) If $x = 6$ draw the back end of a horse in the background.														
(a) If $x = 15$ draw a boot in the background.														
(b) If $x = 45$ draw a belt in the background.														



**Directions:** Solve each problem and **COLOR** the object that corresponds with your answer.  
**SHOW YOUR STEPS!!!**

<p>13. Solve for <math>x</math>.</p>  <p>(a) If <math>x = 12</math> color the stripe on the hat orange. (b) If <math>x = 12\sqrt{3}</math> color the stripe on the hat green.</p>	<p>14. Solve for <math>x</math>.</p>  <p>(a) If <math>x = 12</math> color the rest of the hat yellow. (b) If <math>x = 8\sqrt{3}</math> color the rest of the hat brown.</p>	<p>15. Solve for <math>x</math>.</p>  <p>(a) If <math>x = 12\sqrt{3}</math> color the hair, eyebrows, and mustache yellow. (b) If <math>x = 24</math> color the hair, eyebrows, and mustache black.</p>
<p>16. Solve for <math>x</math>.</p>  <p>(a) If <math>x = \frac{14\sqrt{3}}{3}</math> color the eyes and eyelids brown. (b) If <math>x = 14\sqrt{3}</math> color the eyes and eyelids blue.</p>	<p>17. Solve for <math>x</math>.</p>  <p>(a) If <math>x = \frac{28\sqrt{3}}{3}</math> color the mouth pink. (b) If <math>x = 28\sqrt{3}</math> color the mouth red.</p>	<p>18. Solve for <math>x</math>.</p>  <p>(a) If <math>x = 15\sqrt{3}</math> color the ears, face, nose, neck, and arms brown. (b) If <math>x = 30</math> color the ears, face, nose, neck, and arms apricot.</p>
<p>19. Solve for <math>x</math>.</p>  <p>(a) If <math>x = 20</math> outline the nose and eyes in orange. (b) If <math>x = 20\sqrt{2}</math> outline the nose and eyes in black.</p>	<p>20. Solve for <math>x</math>.</p>  <p>(a) If <math>x = \frac{7}{2}</math> color the objects on the vest yellow. (b) If <math>x = 7</math> color the objects on the vest gray.</p>	<p>21. Solve for <math>x</math>.</p>  <p>(a) If <math>x = 21</math> color the rest of the vest brown. (b) If <math>x = 42</math> color the rest of the vest black.</p>
<p>22. Solve for <math>x</math>.</p>  <p>(a) If <math>x = 40\sqrt{2}</math> color the shirt red. (b) If <math>x = 40</math> color the shirt blue.</p>	<p>23. Solve for <math>x</math>.</p>  <p>(a) If <math>x = 8</math> color the boot/belt orange. (b) If <math>x = 16</math> color the boot/belt brown.</p>	<p>24. Solve for <math>x</math>.</p>  <p>(a) If <math>x = 10</math> color the area with the grass/bushes green. (b) If <math>x = 5</math> color the area with the grass/bushes brown.</p>
<p>25. Solve for <math>x</math>.</p>  <p>(a) If <math>x = 18</math> color the area above the fence/mountains yellow. (b) If <math>x = 9</math> color the area above the fence/mountains blue.</p>	<p>26. Solve for <math>x</math>.</p>  <p>(a) If <math>x = 60</math> outline the fence/mountains in red. (b) If <math>x = 30</math> outline the fence/mountains in black.</p>	<p>27. Solve for <math>x</math>.</p>  <p>(a) If <math>x = 12\sqrt{2}</math> color the animal as you wish. (b) If <math>x = 24\sqrt{2}</math> do not color the animal.</p>

**Artistic Tip:** When you are done coloring, it looks nice to outline the major features using a black crayon or marker.

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