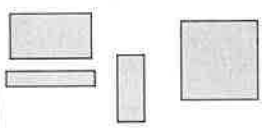


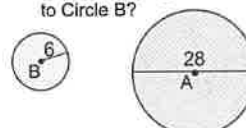
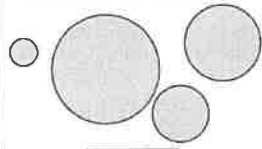


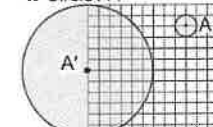
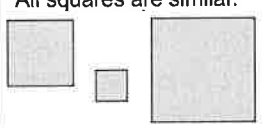
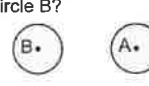
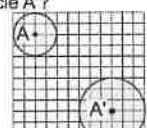
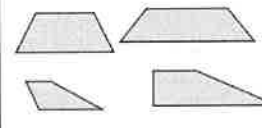
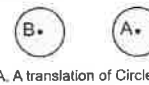
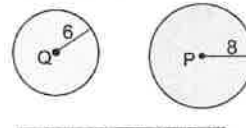

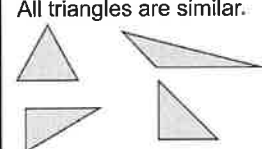
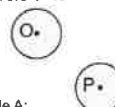
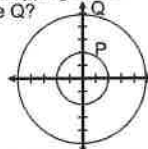
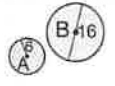


## Similar Circles Assignment #1 Solutions

Use the language of transformations to move one circle onto another circle.  
These transformations help demonstrate all circles are similar.

<p><b>1</b></p> <p>All rectangles are similar.</p>  <p style="text-align: center;">A. True B. False</p>	<p><b>6</b></p> <p>Which set of translations could map Circle A to Circle B?</p>  <p style="text-align: center;">A. Shift left and then shift up B. Shift left and then shift down C. Shift right and then shift down D. Shift right and then shift up</p>	<p><b>11</b></p> <p>Which dilation could help in mapping Circle X to Circle Y?</p>  <p style="text-align: center;">A. Dilation of scale factor 2 B. Dilation of scale factor 1/2</p>	<p><b>16</b></p> <p>Which dilation could help in mapping Circle A to Circle B?</p>  <p style="text-align: center;">A. Dilation of scale factor 3/7 B. Dilation of scale factor 14/3 C. Dilation of scale factor 7/3 D. Dilation of scale factor 3/14</p>
<p><b>2</b></p> <p>All circles are similar.</p>  <p style="text-align: center;">A. True B. False</p>	<p><b>7</b></p> <p>Which set of translations could map Circle A to Circle B?</p>  <p style="text-align: center;">A. A translation of Circle A: <math>(x, y) \rightarrow (x-7, y-2)</math> B. A translation of Circle A: <math>(x, y) \rightarrow (x+7, y-2)</math> C. A translation of Circle A: <math>(x, y) \rightarrow (x+7, y+2)</math> D. A translation of Circle A: <math>(x, y) \rightarrow (x-7, y+2)</math></p>	<p><b>12</b></p> <p>Which dilation could help in mapping Circle Y to Circle X?</p>  <p style="text-align: center;">A. Dilation of scale factor 2 B. Dilation of scale factor 1/2</p>	<p><b>17</b></p> <p>Which dilation could help in mapping Circle A to Circle A'?</p>  <p style="text-align: center;">A. Dilation of scale factor 3 B. Dilation of scale factor 12 C. Dilation of scale factor 5 D. Dilation of scale factor 6</p>
<p><b>3</b></p> <p>All squares are similar.</p>  <p style="text-align: center;">A. True B. False</p>	<p><b>8</b></p> <p>Which set of translations could map Circle A to Circle B?</p>  <p style="text-align: center;">A. Shift left B. Shift right C. Shift up D. Shift down</p>	<p><b>13</b></p> <p>Which dilation could help in mapping Circle A to Circle A'?</p>  <p style="text-align: center;">A. Dilation of scale factor 2/3 B. Dilation of scale factor 2/5 C. Dilation of scale factor 3/2 D. Dilation of scale factor 5/2</p>	<p><b>18</b></p> <p>Circle O has a radius of 20 and Circle P has a diameter of 10. Which could help map Circle P to Circle O?</p> <p style="text-align: center;">A. Dilation of scale factor 2 B. Dilation of scale factor 4 C. Dilation of scale factor 1/2 D. Dilation of scale factor 1/4</p>
<p><b>4</b></p> <p>All rhombi are similar.</p>  <p style="text-align: center;">A. True B. False</p>	<p><b>9</b></p> <p>Which set of translations could map Circle A to Circle B?</p>  <p style="text-align: center;">A. A translation of Circle A: <math>(x, y) \rightarrow (x+8, y)</math> B. A translation of Circle A: <math>(x, y) \rightarrow (x, y-8)</math> C. A translation of Circle A: <math>(x, y) \rightarrow (x, y+8)</math> D. A translation of Circle A: <math>(x, y) \rightarrow (x-8, y)</math></p>	<p><b>14</b></p> <p>Which dilation could help in mapping Circle P to Circle Q?</p>  <p style="text-align: center;">A. Dilation of scale factor 3/4 B. Dilation of scale factor 4/3 C. Dilation of scale factor 3/5 D. Dilation of scale factor 5/3</p>	<p><b>19</b></p> <p>Which set of transformations could map Circle B to Circle A?</p>  <p style="text-align: center;">A. A translation of Circle A: <math>(x, y) \rightarrow (x+5, y-2)</math>, dilation of image A by a scale factor of 0.67 B. A translation of Circle A: <math>(x, y) \rightarrow (x+5, y-2)</math>, dilation of image A by a scale factor of 1.5 C. A translation of Circle A: <math>(x, y) \rightarrow (x-5, y+2)</math>, dilation of image A by a scale factor of 0.67 D. A translation of Circle A: <math>(x, y) \rightarrow (x-5, y+2)</math>, dilation of image A by a scale factor of 1.5</p>
<p><b>5</b></p> <p>All triangles are similar.</p>  <p style="text-align: center;">A. True B. False</p>	<p><b>10</b></p> <p>Which set of translations could map Circle P to Circle O?</p>  <p style="text-align: center;">A. A translation of Circle A: <math>(x, y) \rightarrow (x+4, y-4)</math> B. A translation of Circle A: <math>(x, y) \rightarrow (x-4, y+4)</math> C. A translation of Circle A: <math>(x, y) \rightarrow (x-4, y-4)</math> D. A translation of Circle A: <math>(x, y) \rightarrow (x+4, y+4)</math></p>	<p><b>15</b></p> <p>Which dilation could help in mapping Circle P to Circle Q?</p>  <p style="text-align: center;">A. Dilation of scale factor 3/5 B. Dilation of scale factor 5/3 C. Dilation of scale factor 2/5 D. Dilation of scale factor 5/2</p>	<p><b>20</b></p> <p>Which set of transformations could map Circle B to Circle A?</p>  <p style="text-align: center;">A. A translation of Circle B: <math>(x, y) \rightarrow (x-4, y-2)</math>, dilation of image B by a scale factor of 4/3 B. A translation of Circle B: <math>(x, y) \rightarrow (x-4, y-2)</math>, dilation of image B by a scale factor of 3/4 C. A translation of Circle B: <math>(x, y) \rightarrow (x+4, y+2)</math>, dilation of image B by a scale factor of 4/3 D. A translation of Circle B: <math>(x, y) \rightarrow (x+4, y+2)</math>, dilation of image B by a scale factor of 3/4</p>