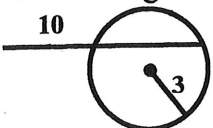
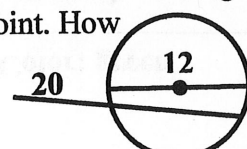
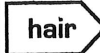






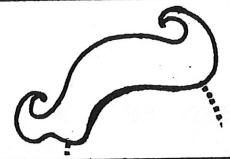

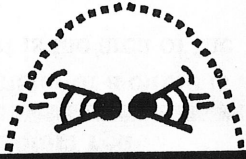



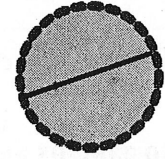
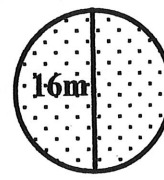



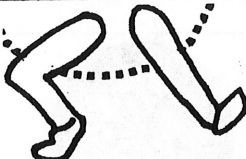


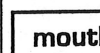


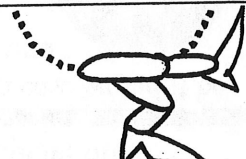


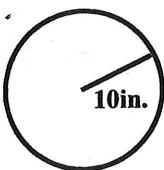









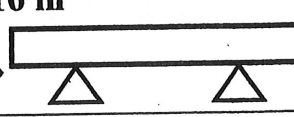
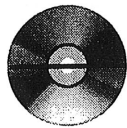

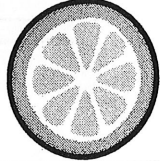
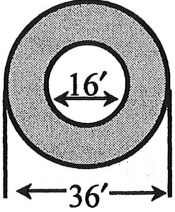
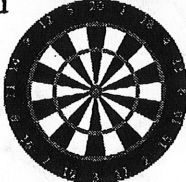




Lesson # 14: Solve and Draw – Circles: Circumference and Area

<p>1. The radius (r) is a line from the center of a circle to a point on the circle. How long is this radius?</p> 	<p>2. The diameter (d) is the distance across a circle through its center point. How long is the diameter?</p> 	<p>3. Circumference is the distance around a circle. Finding this length uses π. Let $\pi = 3.14$. To find the circumference, use the formula $C = d \times \pi$. What's the circumference if $d = 12$?</p>
<p>$r = 3$</p> <p>hair </p> 	<p>$d = 12$</p> <p>eyes </p> 	<p>$C = 37.68$</p> <p>nose </p> 
<p>$r = 10$</p> <p>hair </p> 	<p>$d = 20$</p> <p>eyes </p> 	<p>$C = 376.8$</p> <p>nose </p> 
<p>4. To find the area of a circle, use the formula $A = \pi r^2$. What's the approximate area of a circle with a radius of 8 ft.?</p> 	<p>5. The diameter of a circle is 20. What's the area of the circle?</p> 	<p>6. The diameter of a circle is 16m. What is the circumference?</p> 
<p>about 25 ft.²</p> <p>mouth </p> 	<p>1,256 u²</p> <p>legs </p> 	<p>$C = 25.12$ m</p> <p>arm on R </p> 
<p>about 200 ft.²</p> <p>mouth </p> 	<p>314 u²</p> <p>legs </p> 	<p>$C = 50.24$ m</p> <p>arm on R </p> 
<p>7. A circular rug has a diameter of 12 feet. What's the approximate area of the rug?</p>	<p>8. The radius of a circular platter is 10in. Find the circumference.</p> 	<p>9. The diameter of a circular pizza is 24 in. How much pizza is eaten (in square inches) if half of it is consumed? (Pie and π... hmmm...interesting...)</p>
<p>113 ft.²</p> <p>arm on L </p> 	<p>$C = 62.8$ in.</p> <p>title  -<i>ceptional</i> Dancer</p>	<p>226.08 in²</p> <p>floor </p> 
<p>452 ft.²</p> <p>arm on L </p> 	<p>$C = 31.4$ in.</p> <p>title  -<i>ceptional</i> Performer</p>	<p>452.16 in²</p> <p>floor </p> 

Lesson 14

<p>10. If the diameter is known, how is the radius determined?</p> 	<p>11. Rounded to the nearest whole number, what is the circumference of this circle?</p> 	<p>12. The radius of the slice is 5cm. The slice gets dipped in ink and used as a stamp. What area does the stamp cover?</p> 
<p>$\frac{d}{2}$</p> <p>hair Color: pink</p>	<p>12 mi.</p> <p>eyes Color: green</p>	<p>$A = 7.85 \text{ cm}^2$</p> <p>nose Color: purple</p>
<p>$\frac{1}{2}\pi \times d$</p> <p>hair Color: black</p>	<p>39 mi.</p> <p>eyes Color: blue</p>	<p>$A = 78.5 \text{ cm}^2$</p> <p>nose Color: green</p>
<p>13. Find the area of the shaded part.</p> 	<p>14. In which case would it be necessary to find the area of this circle?</p> 	<p>15. A circular pool cover has a radius of four feet. Which represents the area of the pool cover?</p> 
<p>1218.32 ft²</p> <p>mouth Color: green</p>	<p>to cover the surface of the dartboard</p> <p>sleeves Color: yellow</p>	<p>$8\pi \text{ in}^2$</p> <p>boots Color: gray</p>
<p>816.4 ft²</p> <p>mouth Color: red</p>	<p>to make a frame around the dartboard</p> <p>sleeves Color: red</p>	<p>$16\pi \text{ in}^2$</p> <p>boots Color: orange</p>
<p>16. Find the area of the giant cookie!</p> 	<p>17. The diameter of a circle is 100cm. What is the area of the circle?</p>	<p>18. The area of a circle is 153.9cm². Which is the approximate size of its radius?</p>
<p>1,962.5 in²</p> <p>limbs Color: purple</p>	<p>$A = 7,850 \text{ cm}^2$</p> <p>floor Color: green</p>	<p>about 14 cm</p> <p>shell Color: blue</p>
<p>7,850 in²</p> <p>limbs Color: pink</p>	<p>$A = 31,400 \text{ cm}^2$</p> <p>floor Color: black</p>	<p>about 7 cm</p> <p>shell Color: brown</p>