Lesson 5 Assessment
Estimating and Determining the Area of a Circle

| Estimating and Determining the Area of a Circle |  |  |  |
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| Understands the relationships between radius, diameter, and area of a circle <br> I can cut the circle into equal sections and rearrange them into a rectangle. Half the circumference, or $\pi r$, is the length and $r$ is the width. | Calculates the area of a circle, given its radius <br> What is the area of a circle with radius of 2 cm ? <br> I used the area formula for a circle. $3.14 \times 2^{2}=12.56$ <br> The area is $12.56 \mathrm{~cm}^{2}$. | Calculates the area of a circle, given its diameter <br> What is the area of a circle with diameter of 6 cm ? <br> I found the radius first and then the area. $6 \div 2=3$ <br> The radius is 3 cm . $3.14 \times 3^{2}=28.26$ <br> The area is $28.26 \mathrm{~cm}^{2}$. | Uses circle area formula to solve problems <br> Determine the area of a pizza with a circumference of 94.2 cm . <br> I found the diameter first, then the radius, and finally the area. $\begin{aligned} d=C \div \pi & =94.2 \div 3.14 \\ & =30 \end{aligned}$ <br> The diameter is 30 cm . $30 \div 2=15$ <br> The radius is 15 cm . $\begin{aligned} A=\pi r^{2} & =3.14 \times 15^{2} \\ & =706.5 \end{aligned}$ <br> The area is $706.5 \mathrm{~cm}^{2}$. |
| Observations/Documentation |  |  |  |
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