## Lesson 6 Assessment

Solving Problems with 2-D Composite Shapes

| Solving Problems with 2-D Composite Shapes |  |  |  |
| :---: | :---: | :---: | :---: |
| Decomposes a composite shape into known shapes <br> The track is made up of a rectangle and two half circles. | Applies decomposition to determine the perimeter of a composite shape <br> Perimeter of rectangle portion: <br> $1.2 \mathrm{~m}+2 \mathrm{~m}+1.2 \mathrm{~m}=4.4 \mathrm{~m}$ <br> Perimeter of half circle portion: $(\pi \times 2 \mathrm{~m}) \div 2 \approx 3.14 \mathrm{~m}$ <br> Perimeter of composite shape: <br> $4.4 \mathrm{~m}+3.14 \mathrm{~m}=7.54 \mathrm{~m}$ | Applies decomposition to determine the area of a composite shape <br> Area of rectangle: $1.2 \mathrm{~m} \times 2 \mathrm{~m}=2.4 \mathrm{~m}^{2}$ <br> Area of half circle: $(\pi \times 1 \mathrm{~m} \times 1 \mathrm{~m}) \div 2 \approx 1.57 \mathrm{~m}^{2}$ <br> Area of composite shape: $2.4 \mathrm{~m}^{2}+1.57 \mathrm{~m}^{2}=3.97 \mathrm{~m}^{2}$ | Solves problems involving perimeter and area of composite shapes <br> Determine the perimeter and area of the garden. <br> Perimeter: circumference of circle + 2 sides of rectangle $=(2 \times \pi \times 2)+2 \times 8$ <br> $\approx 28.56$ <br> The perimeter is about 28.56 m . <br> Area: circle + rectangle $=(\pi \times 2 \times 2)+8 \times 4$ <br> $\approx 44.56$ <br> The area is about $44.56 \mathrm{~m}^{2}$. |
| Observations/Documentation |  |  |  |
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