## Mid-Chapter Review

1. Gino is making a kitchen border with these tiles.

a) Measure and label the side lengths and angles.
b) Which tile is not similar to the others? How do you know? e.g., The angles in $B$ are not equal to corresponding angles in $A$ or $C$, so $B$ is not similar to $A$ or $C$.
2. Are $\triangle X Y Z$ and $\triangle X T S$ similar? How do you know? e.g., $\angle X S T$ and $\angle X Z Y$ are right angles, or $90^{\circ} . \angle X$ is shared by the triangles. Since the sum of angles in a triangle is $180^{\circ}, \angle X T S=\angle X Y Z$. Since the corresponding angles of the triangles are equal, the triangles are similar.

3. The chart shows how the side lengths of four polygons were enlarged or reduced. Fill in the missing information.

|  | Polygon A | Polygon B | Polygon C | Polygon D |
| :--- | :---: | :---: | :---: | :---: |
| original side length | 5 cm | 8 ft | 9 m | 24 in. |
| image side length | 15 cm | 4 ft | 18 m | 6 in. |
| scale factor | 3 | 0.5 | $200 \%$ | $25 \%$ |

4. Mai is designing a skatepark. She drew a scale drawing of the side view of a ramp. She is planning other ramps that are the same shape but different sizes. Draw a $40 \%$ reduction and a $110 \%$ enlargement of Mai's ramp on another sheet of paper.

