Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period \_\_\_\_\_\_\_\_\_\_\_\_\_

**Unit 7 Review**



1. Name the shape of a vertical

cross section of a cone.

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

1. For kite *WXYZ*, find m∠*Z.*



1. Determine whether the quadrilateral is a parallelogram. Justify your answer.



1. Find the values of x and y that prove the quadrilateral is a parallelogram.



**A** x = 20; y = 12

**B** x = 168; y = 12

**C** x = 129; y = 51

**D** x = 20; y = 160

1. In rhombus *LMNP*, if *LM* = 7, find *NP*.



1. In isosceles trapezoid *FIZP*, if *IC* = 7.9 and *FZ* = 14.3, find *CP.*



1. The measure of each interior angle of a regular polygon is 172. Find the number of sides in the polygon. **Show all work.**

**Use the diagram below to answer questions 8 and 9. Show all work.**

**

1. What is the length of segment *AK*?
2. Show that *ABCD* is a parallelogram using the properties of a parallelogram.
3. Find the measure of each interior angle for a regular heptagon. Round to the nearest tenth if necessary. **Show all work.**
4. Given *P(-5, -8), Q(4, -8), R(4, 1), and S(-5, 1),* determine if the quadrilateral is a rhombus, rectangle, or square. List all that apply, and explain your reasoning.
5. Find the measure of an exterior angle of a regular polygon with 16 sides. Round to the nearest tenth if necessary. **Show all work.**
6. Find the measure of each exterior angle for a regular triangle. Round to the nearest tenth if necessary.
7. Find the measure of each interior angle of a nonagon in which the measure of the interior angles are 3x +15, 2x + 30, 3x + 10, 2x + 55, 2x + 60, 2x – 35, 3x – 5, x + 40, and 2x + 70. **Show all work.**

**For questions 15 and 16, use the rectangle below. Show all work.**



1. If *AG* = 8*s* + 39 and *DG*= -3*s* + 72, find *BD.*
2. If m∠*ADB* = 6*m* + 91 and m∠*CDB* = -4*m* + 17, find m∠*CBD.*
3. Name the shape resulting from the cross-section of the triangular prism shown below.



1. The measure of each exterior angle of a regular polygon is 18. Find the number of sides in the polygon. **Show all work.**

**Name the cross section created in each of the drawings below.**

**19.**



**20.**



**21.**



**22.**



**23.**



**24.**



**25.**

