The Polygon Angle-Sum Theorems

**Find the sum of the angle measures of each polygon.**

 **1. 2. 3.**

 **4.** 12-gon **5.** 18-gon **6.** 25-gon

**Find the measure of one angle in each regular polygon. Round to the nearest tenth if necessary.**

 **7. 8. 9.**

**10.** regular 15-gon **11.** regular 11-gon **12.** regular 13-gon

**Algebra Find the missing angle measures.**

**13. 14.**

**Algebra Find the missing angle measures.**

**15. 16. 17.**



**Find the measure of an exterior angle of each regular polygon. Round to the nearest tenth if necessary.**

**18.** decagon **19.** 16-gon **20.** hexagon

**21.** 20-gon **22.** 72-gon **23.** square

**Find the values of the variables for each regular polygon. Round to the nearest tenth if necessary.**

**24. 25. 26.**

**The measure of an exterior angle of a regular polygon is given. Find the measure of an interior angle. Then find the number of sides.**

**27.** 12 **28.** 6 **29.** 45