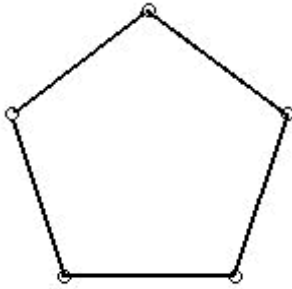


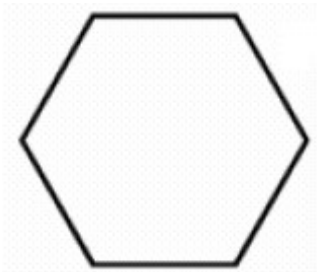
Advanced Geometry:
Area of Sector Applications

Name: _____

- 1.) A dog is tied outside so that its leash is anchored to the corner of a shed in the shape of a regular pentagon with side length 75 feet. On how much area can the dog roam if its leash is 140 feet long?



- 2.) A dog is tied outside so that its leash is anchored to the corner of a shed in the shape of a regular hexagon with side length 60 feet. On how much area can the dog roam if its leash is 100 feet long?



3.) A dog is tied outside so that its leash is anchored to the corner of a shed in the shape of a regular 15-gon with side length 55 feet. On how much area can the dog roam if its leash is 150 feet long?

4.) A dog is tied outside so that its leash is anchored to the corner of a shed in the shape of a regular decagon with side length 35 feet. On how much area can the dog roam if its leash is 80 feet long?