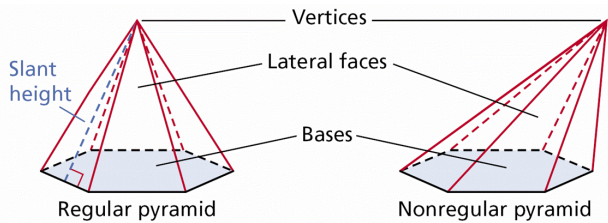**Geometry: 10-5 Notes**

Vocabulary:

The _____ of a pyramid is the point opposite the base of the pyramid. The base of a _____ pyramid is a regular polygon, and the lateral faces are congruent isosceles triangles.
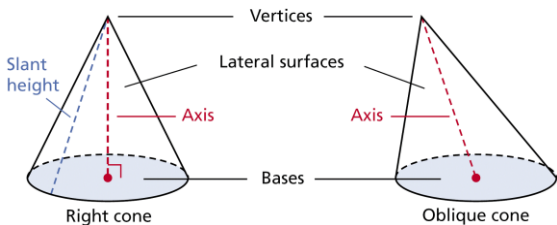
The _____ of a regular pyramid is the distance from the vertex to the midpoint of an edge of the base.

The _____ of a pyramid is the perpendicular segment from the vertex to the plane of the base.

The _____ of a cone is the point opposite the base.

The _____ of a cone is the segment with endpoints at the vertex and the center of the base. The axis of a _____ cone is perpendicular to the base. The axis of an _____ cone is not perpendicular to the base. The _____ of a right cone is the distance from the vertex of a right cone to a point on the edge of the base.

The _____ of a cone is a perpendicular segment from the vertex of the cone to the plane of the base.
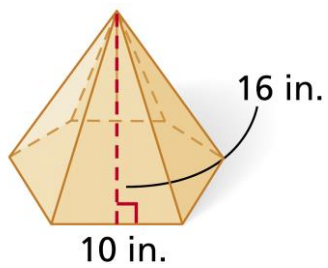
Formulas	
Lateral Area	LA (pyramid) = LA (cone) =
Surface Area	SA (pyramid) = SA (cone) =

Examples:
1) Find the lateral area and surface area of a regular square pyramid with base edge length 14 cm and slant height 25 cm.
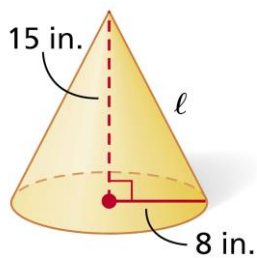
12 ft

15 ft
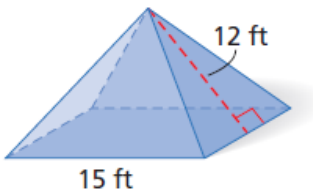
2) Find the lateral area and surface area of the regular pyramid.

16 in.

10 in.

3) Find the lateral area and surface area of a right cone with radius 9 cm and slant height 5 cm.

4) Find the lateral area and surface area of the right cone.

15 in.

ℓ

8 in.

5) The base edge length and slant height of the regular hexagonal pyramid are both divided by 5. Describe the effect on the surface area.

15 in.

10 in.