

Surface Area of a Pentagonal Pyramid

Name: _____

Date: _____

To find the surface area of a pentagonal pyramid ($A = \frac{5}{2}ab + \frac{5}{2}bs$).

- 1) The surface area of a pentagonal pyramid is 939square feet, apothem length of 6feet and the side of the square is 12feet. Find the slant height of the pentagonal pyramid.

- 2) Find the base area of the pentagonal pyramid whose lateral edge is 15meters, apothem length of 5meters and the height is 7meters?

- 3) Find the surface area of a pentagonal pyramid with a base length of 16centimeters, apothem length of 7centimeters and a slant height of 19centimeters.

- 4) Find the surface area of a pentagonal pyramid with a base length of $\frac{2}{5}$ inch, apothem length of $\frac{1}{8}$ inch and a slant height of $\frac{5}{10}$ inch.

- 5) Find the slant height of a pentagonal pyramid with a base area of 192.5square millimeters, apothem length of 7millimeters and a height of 11millimeters?

- 6) What is the base area of the pentagonal pyramid whose lateral edge is 24yards, apothem length of 8yards and the height is 14yards?

- 7) Find the surface area with a base length of 9centimeter, apothem length of 3centimeter and a slant height of 15centimeter.

- 8) The surface area of a pentagonal pyramid is given by 1243.45square meters, apothem length of 5meters and the side of the pyramid is 13meters. Find the slant height of the pentagonal pyramid.

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- 1) The surface area of a pentagonal pyramid is 939square feet, apothem length of 6feet and the side of the square is 12feet. Find the slant height of the pentagonal pyramid.

25.3 feet

- 2) Find the base area of the pentagonal pyramid whose lateral edge is 15meters, apothem length of 5meters and the height is 7meters?

87.5 square meters

- 3) Find the surface area of a pentagonal pyramid with a base length of 16centimeters, apothem length of 7centimeters and a slant height of 19centimeters.

1040 square centimeters

- 4) Find the surface area of a pentagonal pyramid with a base length of $\frac{2}{5}$ inch, apothem length of $\frac{1}{8}$ inch and a slant height of $\frac{5}{10}$ inch.

0.625 square inches

- 5) Find the slant height of a pentagonal pyramid with a base area of 192.5square millimeters, apothem length of 7millimeters and a height of 11millimeters?

28.2 millimeters

- 6) What is the base area of the pentagonal pyramid whose lateral edge is 24yards, apothem length of 8yards and the height is 14yards?

280 square yards

- 7) Find the surface area with a base length of 9centimeter, apothem length of 3centimeter and a slant height of 15centimeter.

405 square centimeters

- 8) The surface area of a pentagonal pyramid is given by 1243.45square meters, apothem length of 5meters and the side of the pyramid is 13meters. Find the slant height of the pentagonal pyramid.

33.26 meters
