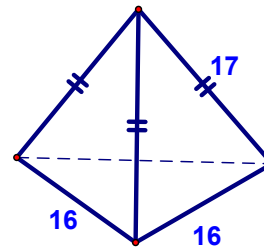


2.

For the regular triangular right pyramid shown, what is

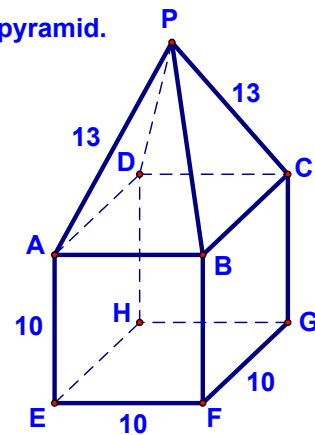
- The area of each lateral face?
- The area of the base?
- The total surface area?



4.

The diagram shows a solid that is a combination of a prism and a regular right pyramid.

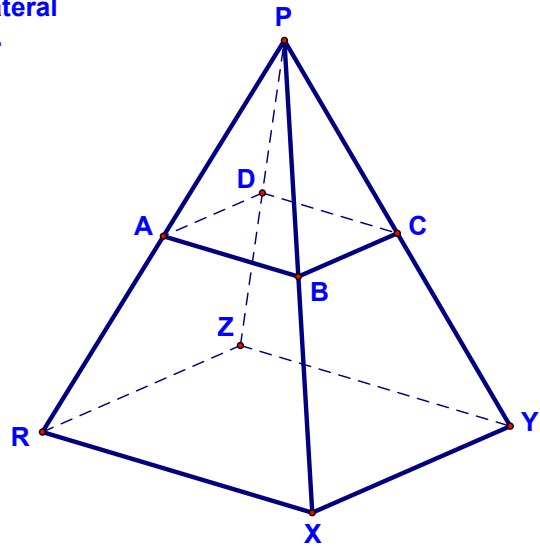
- Is ABCD a face of the solid?
- How many faces does this solid have?
- Find the total surface area.



5.

PRXYZ is a square based right pyramid. The midpoints of its lateral edges are joined to form a square, ABCD. $PR = 10$ and $RX = 12$.

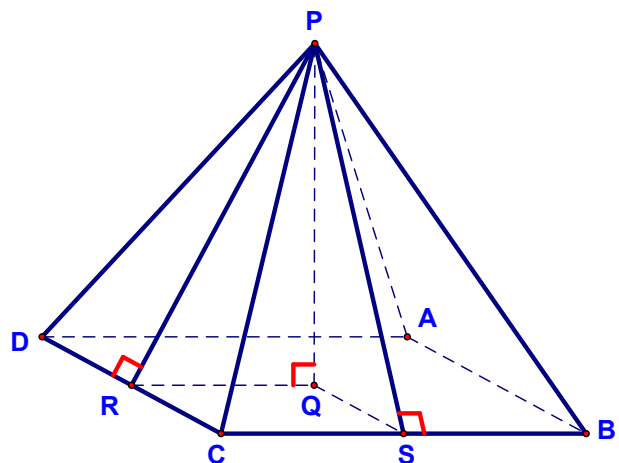
- Find the lateral area of PRXYZ.
- Find the lateral area of pyramid PABCD.
- What is that area of square ABCD?
- What is the area of square RXYZ?
- Find the ratio of the area of ABCD to the area of RXYZ.
- What is the area of trapezoid ABXR?



8.

PABCD is a square based right pyramid.

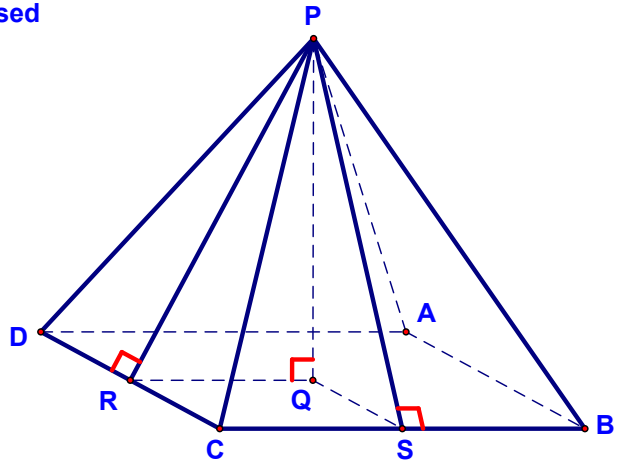
- If each side of the base has a length of 14 and the altitude (\overline{PQ}) is 24, find the pyramid's lateral area and total area.
- If each slant height is 17 and the altitude is 15, find the pyramid's lateral area and total area.



9.

Suppose that the pyramid in problem 8 was not square based but had a rectangular base and congruent lateral edges.

- a. Given that $PQ=8$, $CD = 12$, and $BC = 30$, find PR (the slant height of face PCD), PS (the slant height of face PBC), and the lateral area and the total area of the pyramid.
- b. If each lateral edge were 25 and the base was 24 by 30, what would the altitude (\overline{PQ}) of the pyramid be?



11.

A regular tetrahedron is a pyramid with four equilateral triangular faces. If a regular tetrahedron has an edge of 6, what is

- a. It's total surface area?
- b. It's height?

