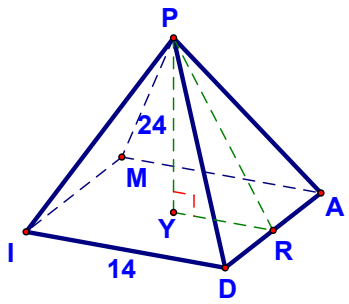
5.

Given: Regular square pyramid PAMID with slant height $\overline{PR}$, altitude $\overline{PY}$
ID = 14
PY = 24

Find:
a. AD
b. YR
c. PR
d. The perimeter of base AMID
e. A diagonal of the base (not shown)



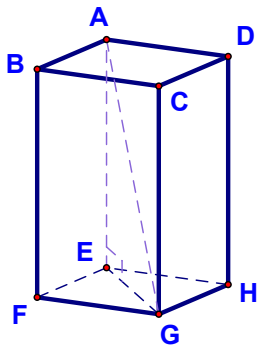
6.

Find the slant height of a regular square pyramid if the altitude is 12 and one of the sides of the square base is 10.

13.

ABCDEFGH is a rectangular solid.

a. **If face diagonal $\overline{CH}$ measures 17, edge $\overline{GH}$ measures 8, and edge $\overline{FG}$ measures 6, how long is diagonal $\overline{AG}$?**



b. **If diagonal $\overline{AG}$ measures 50, edge $\overline{AE}$ measures 40, and edge $\overline{EF}$ measures 3, how long is edge $\overline{FG}$?**

14.

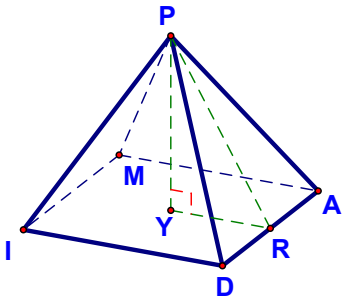
PADIM is a regular square pyramid. Slant height $\overline{PR}$ measures 10, and the base diagonals measure $12\sqrt{2}$.

a. **Find ID**

b. **Find the altitude of the pyramid**

c. **Find RD**

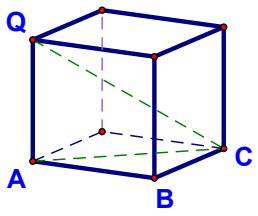
d. **Find PD (length of a lateral edge)**



17. **The perimeter of the base of a regular square pyramid is 24. If the slant height is 5, find the altitude.**

18. **In the cube, find the measure of the diagonal in terms of x if:**

a. AB = x



b. AC = x

19.

Find a formula for the length of a diagonal of a rectangular solid (use a, b, and c for the three dimensions)