Task:
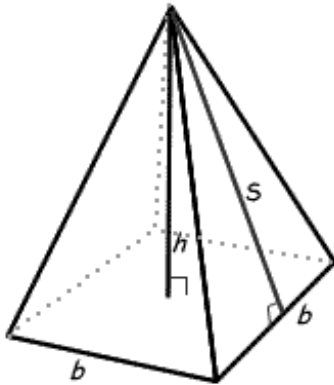
Surface area of a regular square pyramid with the slant height of 7 and base perimeter of 10.

Solution:

Square Based Pyramid

Surface
Area $A = 2bs + b^2$

Perimeter of square whose four sides have length b is $P = 4b$, hence we obtain $b = \frac{P}{4}$.

$$b = \frac{10}{4} = 2.5$$

Surface Area is determined by $A = 2bs + b^2$, where s is slant height.

$$A = 2 \cdot 2.5 \cdot 7 + 2.5^2 = 35 + 6.25 = 41.25$$

Answer: 41.25 square units.