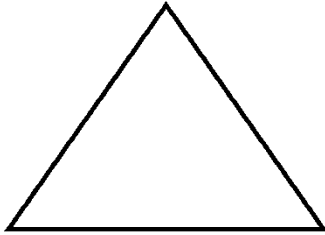


FINDING AREA & PERIMETER OF REGULAR POLYGONS IN WORD PROBLEMS

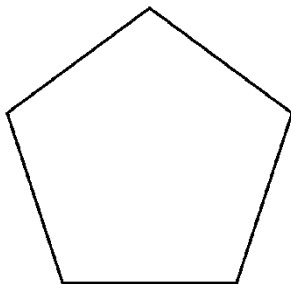
1. Mrs. Smith wants to add a triangular deck in the yard behind her house. Each side is to be 18 feet long. Find the length of the railing that will fit completely around the deck. Then find the area of the deck. Leave answer in exact radical form.



$$P = \underline{\hspace{2cm}}$$

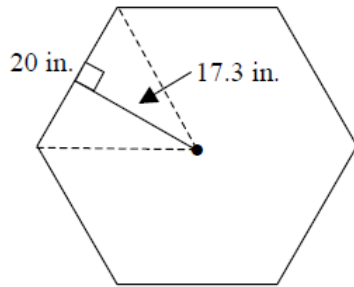
$$A = \underline{\hspace{2cm}}$$

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2. One of the most famous buildings in the United States is the Pentagon in Arlington, Virginia, where the Defense Department is located. This tremendous office complex has 17.5 miles of corridors. Each side of the building is 921 feet long, and the apothem of the pentagon is 633.8 feet. What is the area of the Pentagon?



$$A = \underline{\hspace{2cm}}$$

3. How much glass will need to be cut to make a regular hexagonal window 20 inches on each side for a bathroom window?



A= _____

4. If a square garden has a radius of 10 ft, Find the area and perimeter. Leave answer in exact radical form.

P= _____

A = _____