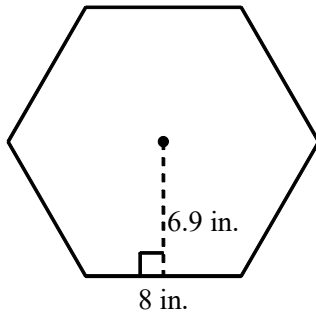


1. Find the area of a regular pentagon with an apothem 8.3 feet long and a side 12 feet long.
 [A] 124.5 ft^2 [B] 498 ft^2 [C] 199.2 ft^2 [D] 249 ft^2

2. Find the area of the regular polygon.



3. Find the area of a regular octagon with an apothem 3.6 miles long and a side 3 miles long.

4. A regular hexagon has apothem 8 units. Find its area.

5. Find the area of a regular hexagon with side 6.

6. Compare the quantity in Column A with the quantity in Column B.

<u>Column A</u>	<u>Column B</u>
the area of a regular octagon with apothem 4 and side 4	the area of a regular hexagon with apothem 4 and side 4

- [A] The quantity in Column A is greater. [B] The quantity in Column B is greater.
 [C] The two quantities are equal.
 [D] The relationship cannot be determined on the basis of the information supplied.

7. Two adjacent vertices of a regular hexagon are $(0, 0)$ and $(3, 4)$. Find the area of the hexagon.

8. A regular hexagonal box has square sides. What is the ratio of the area of a side to the area of the base?

- [A] $\sqrt{3}:1$ [B] $2:3\sqrt{3}$ [C] $\sqrt{3}:2$ [D] $2:3$ [E] $1:\sqrt{3}$

Geometry Practice G.MG.A.3: Area 7

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[1] D

[2] 165.6 in.²

[3] 43.2 mi²

[4] $128\sqrt{3}$ square units

[5] $54\sqrt{3}$

[6] A

[7] $\frac{75}{2}\sqrt{3} \approx 65$ sq units

[8] B