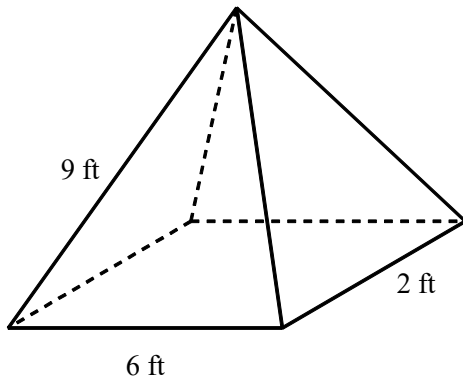


NAME: \_\_\_\_\_

1. The lateral area of a cone is  $20\pi$  in.<sup>2</sup>. If the radius is 10 in., find the slant height.

[A] 0.5 in.                      [B]  $2.0\pi$  in.                      [C] 2.0 in.                      [D]  $0.5\pi$  in.

2. The pyramid shown has a rectangular base and faces that are isosceles triangles. Find the total surface area to the nearest tenth.



[A]  $203.6$  ft<sup>2</sup>                      [B]  $80.8$  ft<sup>2</sup>                      [C]  $84.0$  ft<sup>2</sup>                      [D]  $36.0$  ft<sup>2</sup>

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

<u>Column A</u>	<u>Column B</u>
the surface area of a square prism with base edge 4 and height 5	the surface area of a square pyramid with base edge 4 and slant height 5

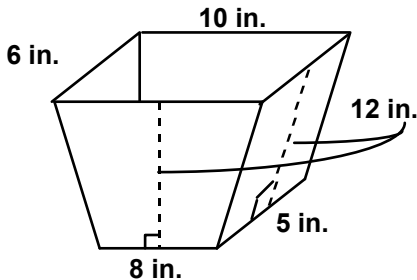
[A] The quantity in Column A is greater.                      [B] The quantity in Column B is greater.  
[C] The two quantities are equal.  
[D] The relationship cannot be determined on the basis of the information supplied.

NAME: \_\_\_\_\_

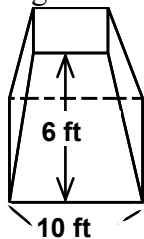
4. The designers of a float want to make a cone shape 4 ft in diameter and 6 ft high covered with roses. If it costs \$10 per square foot to cover the cone with roses, how much will the flowers cost?

5. Calculate the surface area of a square pyramid if the side length of the base is 4 cm and the slant height is 7 cm.

6. Find the amount of material needed to cover the outside of the wastebasket shown below.



7. The frustum of a pyramid is the part of a pyramid between the base and a plane that cuts the pyramid parallel to the base. The frustum below was created by cutting the pyramid with a plane that contains the midsegments of the triangular sides. Find the area of one trapezoidal face.



[1] C

[2] B

[3] A

[4] about \$397

[5] 72 cm<sup>2</sup>

[6] 388 in.<sup>2</sup>

[7] The top edge is  $\frac{10}{2} = 5$  ft, so the area of a side is  $\frac{6(10+5)}{2} = 45$  ft<sup>2</sup>.