



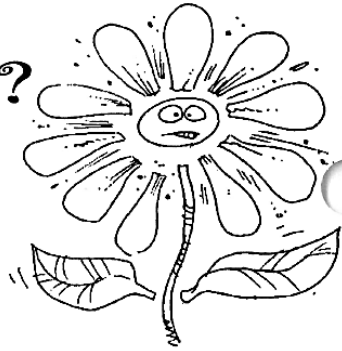
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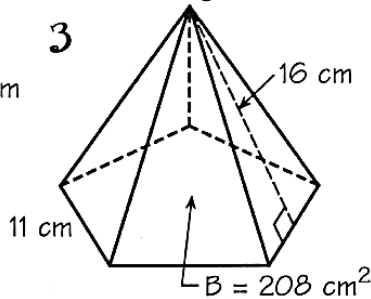
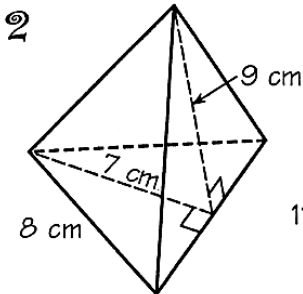
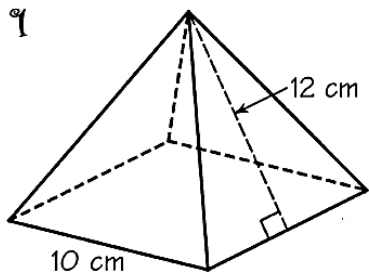
Triangle Area = $\frac{1}{2}bh$ Parallelogram Area = bh Trapezoid area = $\frac{1}{2}(b_1+b_2)h$ Circumference = πd or $2\pi r$
 Circle Area = πr^2 $\pi \approx 3.14$ for rough estimates: $\pi \approx 3$ Surface area of a cylinder = $2\pi r^2 + 2\pi rh$
 Volume of prisms and cylinders: $V = Bh$ (B = area of the base shape) Volume of pyramids and cones: $V = \frac{1}{3}Bh$

What Sound Is Heard When Flowers Explode?

Circle each correct answer in the answer column. When you finish, arrange the letters of the correct answers in order from least to greatest surface area. Write the letters in this order in the boxes at the bottom of the page.

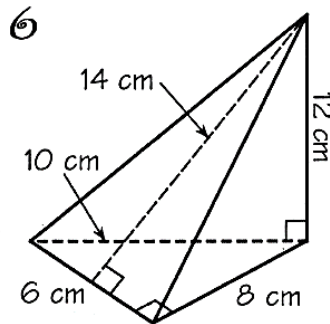
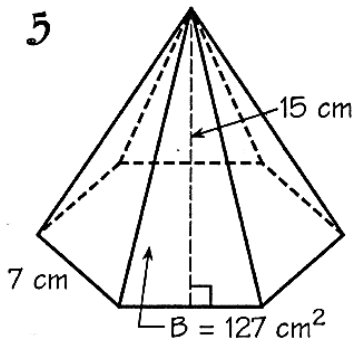
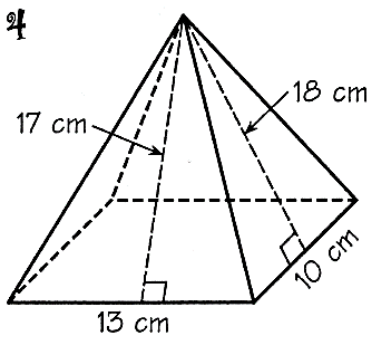


Find the surface area. Except in Exercises 4, 6, and 7, the figure is a regular pyramid (the base is a regular polygon and lateral faces are congruent isosceles triangles).

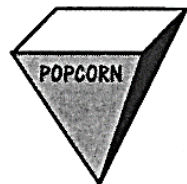


Answers

- R 142 cm²
- A 174 cm²
- K 136 cm²
- E 396 cm²
- B 340 cm²
- S 124 cm²
- O 531 cm²
- M 728 cm²
- T 552 cm²
- L 442 cm²
- N 812 cm²
- C 648 cm²



7 A popcorn box is in the shape of a rectangular pyramid with no base. The rectangular opening measures 20 cm by 12 cm. The slant height to the 20 cm side is 22 cm. The slant height to the 12 cm side is 24 cm. How much cardboard is needed to make the box?



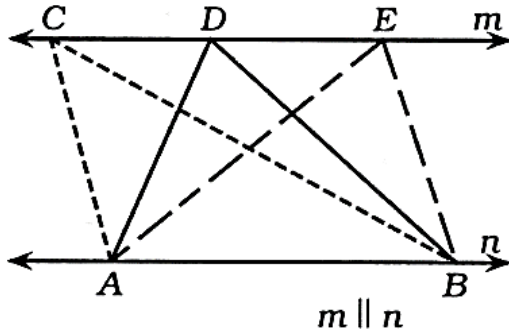
Letter of "least area" correct answer

| | | | | | |
|--|--|--|--|--|--|
| | | | | | |
|--|--|--|--|--|--|

Letter of "greatest area" correct answer

Extra #1

The figure below shows three triangles drawn between parallel lines. How do the areas of the triangles compare to each other. Explain.



Extra #2

Find the area enclosed by this figure drawn on a 5 by 5 piece of dot paper.

