1. The slant height of a cone is used to calculate its:
A. Volume
B. Total surface area
C. Radius
D. Perimeter (B)
Explanation: The slant height is used in the formula for the surface area of a cone.

2. The curved surface area of a cone is calculated as:
A. πr^2
B. $\pi r \ell$
C. $2\pi r \ell$
D. $2\pi r(r + \ell)$ (B)
Explanation: The formula for the curved surface area of a cone is $\pi r \ell$.

3. The total surface area of a cone is:
A. $\pi r \ell$
B. $\pi r(\ell + r)$
C. πr^2
D. $2\pi r(r + h)$ (B)
Explanation: The total surface area includes the curved surface area and the area of the base, given by $\pi r(\ell + r)$.

4. The slant height of a cone is given by the formula:
A. $\sqrt{(r^2 + h^2)}$
B. $r \times h$
C. $r^2 + h^2$
D. $r + h$ (A)
Explanation: The slant height is calculated using the Pythagorean theorem: $\sqrt{(r^2 + h^2)}$.

5. If the radius of a cone is 7 cm and its slant height is 10 cm, the curved surface area is:
A. 440 cm^2
B. 660 cm^2
C. 880 cm^2
D. 1100 cm^2 (B)
Explanation: Curved surface area = $\pi r \ell = 3.14 \times 7 \times 10 = 660\ cm^2$.

6. The slant height of a cone can be found if you know the:
A. Radius and height
B. Volume and radius
C. Radius and base area
D. Curved surface area only (A)
Explanation: The slant height can be calculated using the radius and height via the Pythagorean theorem.

7. In a conical tent, if the height is 10 m and the radius of the base is 24 m, you need to find the:
A. Volume
B. Surface area
C. Slant height
D. Radius (C)
Explanation: The slant height is calculated using the radius and height.

8. The formula for the volume of a cone is:
A. $1/3\pi r^2 h$
B. $1/2\pi r^2 h$
C. $\pi r^2 h$
D. $2/3\pi r^2 h$ (A)
Explanation: Volume of a cone = $1/3\pi r^2 h$.

9. If the radius of a cone is 5 cm and the total surface area is 660 cm^2, the slant height is:
A. 7 cm
B. 37 cm
C. 40 cm
D. 42 cm (B)
Explanation: Using the total surface area formula, the slant height is 37 cm.

10. A cone has a height of 16 cm and a base radius of 12 cm. The total surface area can be calculated by:
A. $\pi r^2 + \pi r \ell$
B. $\pi r^2 + 2\pi r \ell$
C. $2\pi r(\ell + r)$
D. πr^2 (A)
Explanation: The total surface area is the sum of the curved surface area and the area of the base: $\pi r^2 + \pi r \ell$.

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