

Cone net - answers

Worked answers / Keep separate from the student sheet.

1. A right cone has base radius 6 mm and vertical height 13 mm. Find slant height and net sector angle.

Slant = $\sqrt{r^2 + h^2}$ = 14.31782 mm. Sector = $360r/\text{slant}$ = 150.86094 degrees.

2. A right cone has base radius 7 mm and vertical height 16 mm. Find slant height and net sector angle.

Slant = $\sqrt{r^2 + h^2}$ = 17.46425 mm. Sector = $360r/\text{slant}$ = 144.29478 degrees.

3. A right cone has base radius 8 mm and vertical height 19 mm. Find slant height and net sector angle.

Slant = $\sqrt{r^2 + h^2}$ = 20.61553 mm. Sector = $360r/\text{slant}$ = 139.70052 degrees.

4. A right cone has base radius 9 mm and vertical height 22 mm. Find slant height and net sector angle.

Slant = $\sqrt{r^2 + h^2}$ = 23.76973 mm. Sector = $360r/\text{slant}$ = 136.30782 degrees.

5. A right cone has base radius 10 mm and vertical height 25 mm. Find slant height and net sector angle.

Slant = $\sqrt{r^2 + h^2}$ = 26.92582 mm. Sector = $360r/\text{slant}$ = 133.70064 degrees.

6. A right cone has base radius 11 mm and vertical height 28 mm. Find slant height and net sector angle.

Slant = $\sqrt{r^2 + h^2}$ = 30.08322 mm. Sector = $360r/\text{slant}$ = 131.63485 degrees.