28: \[ x(x+1)(x+2) = 13,800 \]

Solve using the intersect method:

\[ y_1 = x(x+1)(x+2) \]

\[ y_2 = 13,800 \]

\[ x = 23 \]

The dimensions are 23 cm. x 24 cm. x 25 cm.

30. \[ S = \pi r \sqrt{r^2 + h^2} \]

\[ S = 18\pi \]

\[ h = 4 \text{ cm.} \]

\[ \frac{18\pi}{\pi} = \pi \sqrt{r^2 + 4^2} \]

\[ 18 = r \sqrt{r^2 + 16} \]

Solve using the intersect method:

\[ y_1 = 18 \]

\[ y_2 = x \sqrt{x^2 + 16} \]

\[ x = 3.42 \]

The radius should be about 3.42 cm.