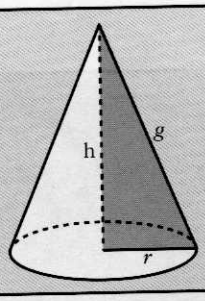
Relación entre *r*, h y *g*

En un cono, el radio, *r*, la altura, h, y la generatriz, *g*, forman un triángulo rectángulo.

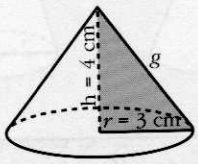
Por tanto:

$g = \sqrt{r^2 + h^2}$, $r = \sqrt{g^2 - h^2}$, $h = \sqrt{g^2 - r^2}$



3. En cada uno de los siguientes conos se conocen dos de los tres elementos *r*, h, *g*. Calcula el que falta.

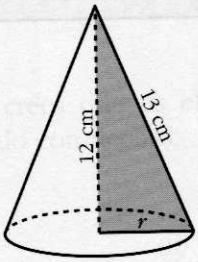
(I)



$g = \sqrt{r^2 + h^2} = \sqrt{3^2 + 4^2} = \sqrt{9 + 16} = \sqrt{25} = 5$

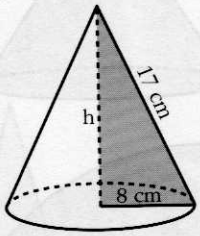
La generatriz mide 5 cm.

(II)



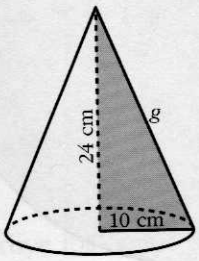
$r = \sqrt{13^2 - 12^2} =$

(III)



h =

(IV)



g =