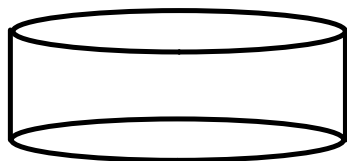


TB p. 111

11. a) The area of the base of this right circular cylinder is greater than 904.78 cm^2 . What is the minimum measure of the radius, to the nearest whole number?



Before you go...

1. Represent the following inequalities on a number line, and as intervals.

a) $-2 < x \leq 3$

b) $x < -1$

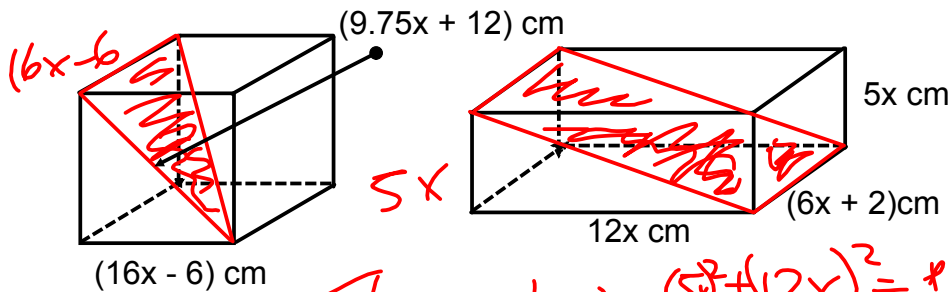
2. Translate the following into an inequality: Although it is cold on planet Mars, the temperature is usually at least -140 degrees.

3. Which inequality symbol is used to represent the word maximum?

Inequalities and Geometry

TB p.113 # 19

By connecting the vertices of a cube and a right prism, we can make some figures. What integer values of x give the right triangle an area that is greater than that of the rectangle?



$$\frac{bh}{2} > lw$$

$$\frac{(16x-6)(9.75x+12)}{2} > 13x(6x+2)$$

$$(5x)^2 + (12x)^2 = 13^2$$

$$25x^2 + 144x^2 = 169$$

$$169x^2 = 169$$

$$13x = 13$$

$F: 78x^2 \quad 0 \quad 192x$

$I: -58.5x \quad L: -72$

$\frac{156x^2 + 133.5x - 72}{2} > 78x^2 + 26x$

$78x^2 + 66.75x - 36 > 78x^2 + 26x$

$66.75x - 26x > 36$

$40.75x > 36$

$x > 0.88$

$16x - 6$

$x = 1$