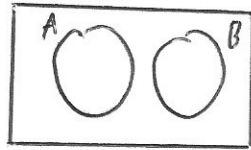




The events A and B are mutually exclusive.

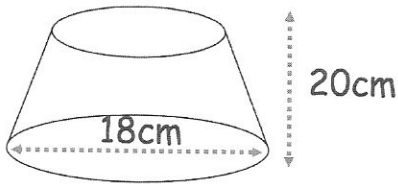
$P(A) = 0.7$

$P(B) = 0.2$



Find $P(A \cap B)$

$P(A \cap B) = 0$



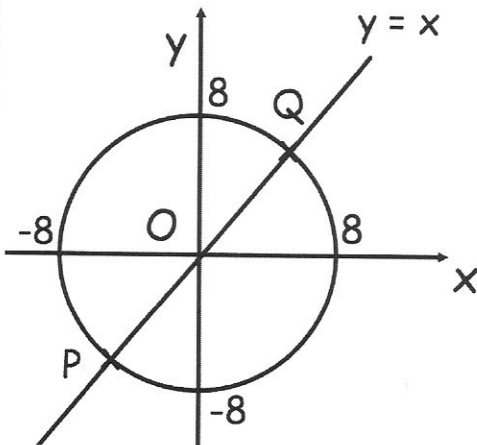
Shown is a frustum of a cone that had a perpendicular height of 40cm

Calculate the volume of the frustum

$V = \frac{1}{3} \times \pi \times 9^2 \times 40 = 3392.92\dots$
 $V = \frac{1}{3} \times \pi \times 4.5^2 \times 20 = 424.115\dots$

2968.8 cm^3

A straight line $y = x$ intersects a circle at the points P and Q.



Find the coordinates of points P and Q.

$x^2 + y^2 = 64$ $y = x$

$x^2 + x^2 = 64$

$2x^2 = 64$

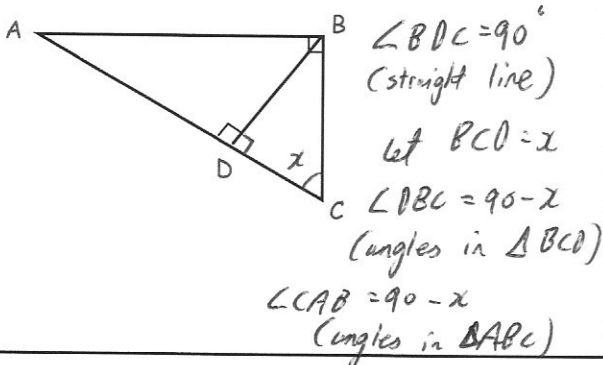
$x^2 = 32$

$x = \pm\sqrt{32}$

$x = 4\sqrt{2}$ or $x = -4\sqrt{2}$

$y = 4\sqrt{2}$ $y = -4\sqrt{2}$

$P(-4\sqrt{2}, -4\sqrt{2})$ $Q(4\sqrt{2}, 4\sqrt{2})$



ABC and ABD are right angled triangles.
 ADC is a straight line.

Prove ABC and BCD are similar triangles.

since AAA they are similar.