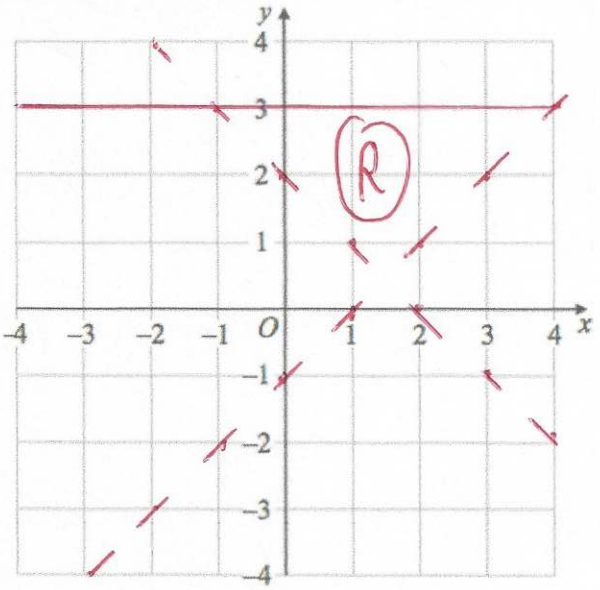
Name: _____ 5-a-day Higher

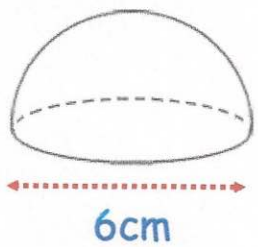
23rd February

Corbettmaths



Show the region which satisfies

$y > x - 1$
$y \leq 3$
$y > 2 - x$



Calculate the volume of the hemisphere.

$V = \frac{1}{2}\left(\frac{4}{3}\pi r^3\right)$

$= \frac{1}{2}\left(\frac{4}{3} \times \pi \times 3^3\right)$

$= 18\pi$ or $56.55 cm^3$

Solve $y^2 - 6y = 27$

$y^2 - 6y - 27 = 0$

$(y + 3)(y - 9) = 0$

$y = -3$ or $y = 9$

Find the area of the rectangle

$\sqrt{12} \times \sqrt{3} = \sqrt{36}$

$6 cm^2$