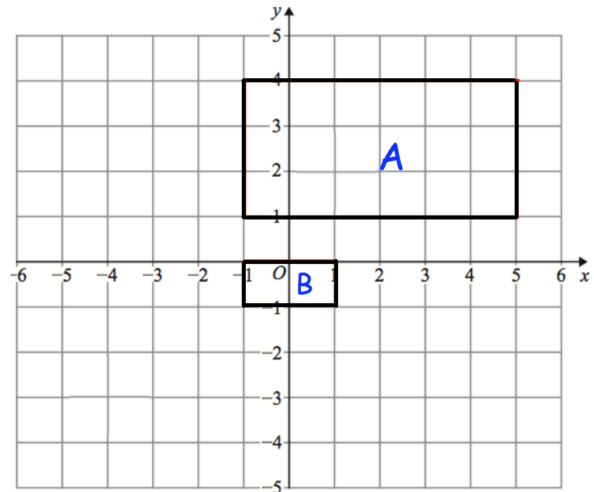




Solve $x^2 - 5x - 84 = 0$

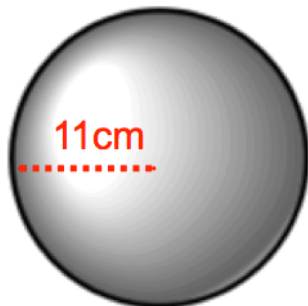
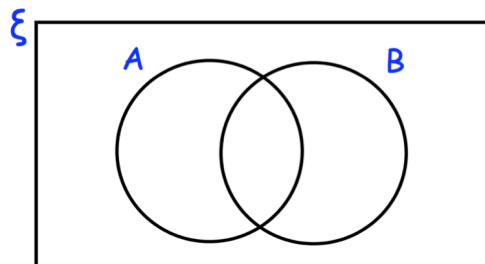
Describe fully the single transformation that maps shape A onto shape B.



Rotate shape B 180° about the point $(2, -2)$.

$\xi = \{1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12\}$
 $A = \{\text{numbers less than } 6\}$
 $B = \{\text{prime numbers}\}$

Draw a Venn diagram for this information.



A sphere has a radius of 11cm.
 Calculate the volume of the sphere.
 Give your answer to 1 decimal place.