

547. Jednadžba kružnice kojoj su točke  $A(3,2)$  i  $B(-1,6)$  krajevi jednog promjera je:

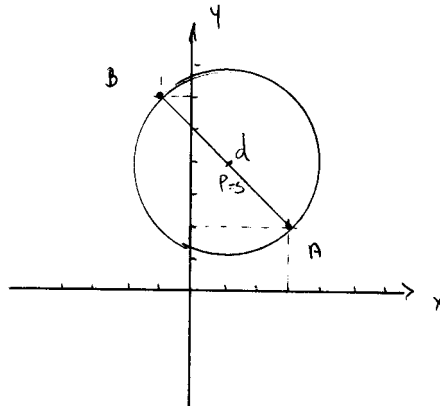
1.  $(x-3)^2 + (y-2)^2 = 6$
2.  $(x-1)^2 + (y-4)^2 = 8$
3.  $(x-3)^2 + (y+1)^2 = 8$
4.  $(x-4)^2 + (y-1)^2 = 6$

$$A(3,2)$$

$$x_A = 3, y_A = 2$$

$$B(-1,6)$$

$$x_B = -1, y_B = 6$$



$$d = 2r$$

$$P = S$$

$$P \left( \frac{x_A + x_B}{2}, \frac{y_A + y_B}{2} \right)$$

$$P = \frac{3-1}{2} = \frac{2}{2} = 1$$

$$q = \frac{2+6}{2} = \frac{8}{2} = 4$$

$$d = 2r$$

$$r = \frac{d}{2}$$

$$(x-P)^2 + (y-q)^2 = r^2$$

$$d = \sqrt{(x_B - x_A)^2 + (y_B - y_A)^2}$$

$$d = \sqrt{(-1-3)^2 + (6-2)^2}$$

$$d = \sqrt{16+16}$$

$$d = \sqrt{32}$$

$$r = \frac{\sqrt{32}}{2} = \frac{y\sqrt{2}}{2} = 2\sqrt{2}$$

$$(x-1)^2 + (y-4)^2 = (2\sqrt{2})^2$$

$$(x-1)^2 + (y-4)^2 = 8$$