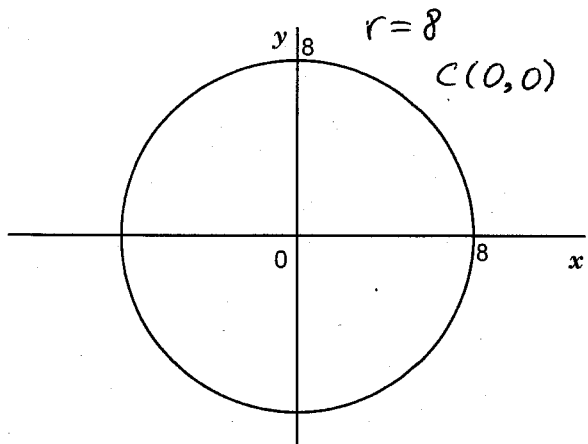


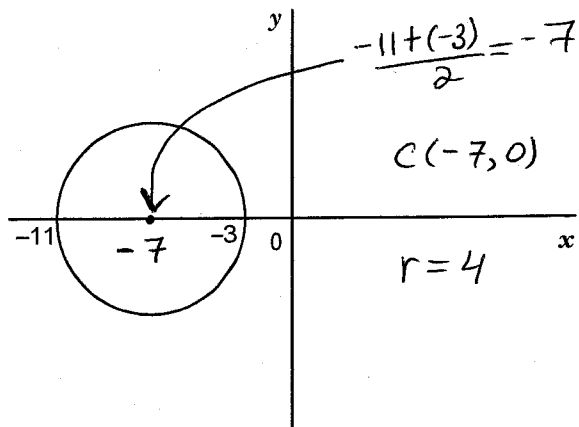
$$(x-h)^2 + (y-k)^2 = r^2$$

$\uparrow$   $x_{\text{centre}}$        $\uparrow$   $y_{\text{centre}}$

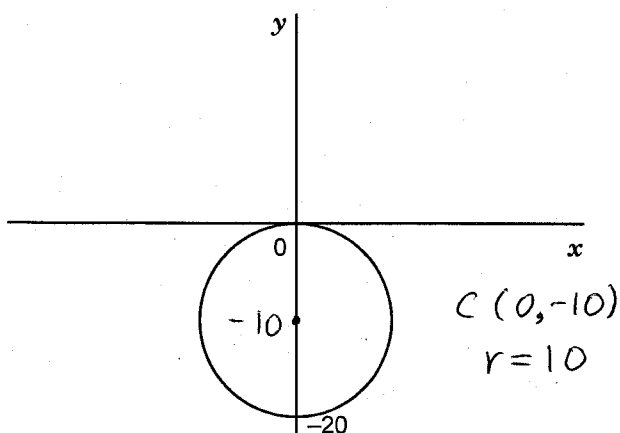
Give equations for each of the following circles in the spaces provided.



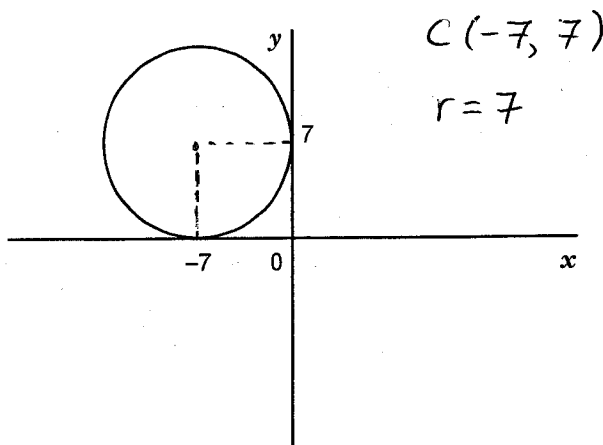
a)  $x^2 + y^2 = 64$



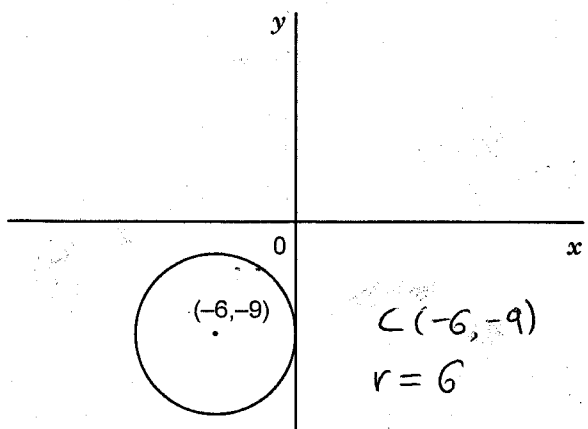
b)  $(x+7)^2 + (y)^2 = 16$



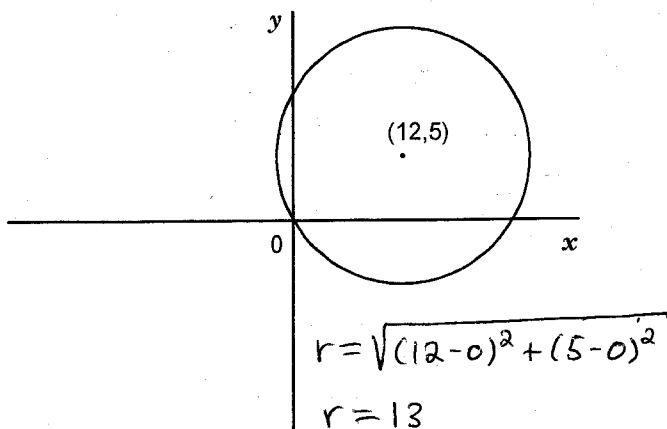
c)  $x^2 + (y+10)^2 = 100$



d)  $(x+7)^2 + (y-7)^2 = 49$



e)  $(x+6)^2 + (y+9)^2 = 36$

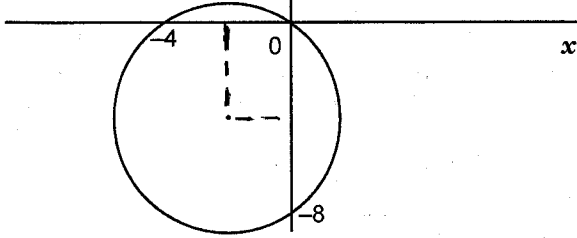


f)  $(x-12)^2 + (y-5)^2 = 169$

$$r = \sqrt{(-2-0)^2 + (-4-0)^2}$$

$$r = \sqrt{4+16} = \sqrt{20}$$

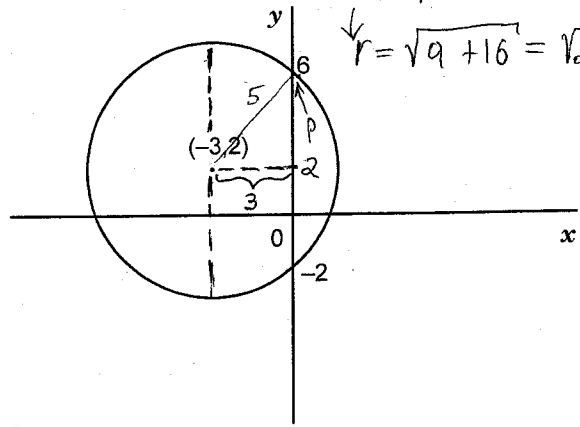
C(-2, -4)



g)  $(x+2)^2 + (y+4)^2 = 20$

$$d_{cp} = \sqrt{(0+3)^2 + (6-2)^2}$$

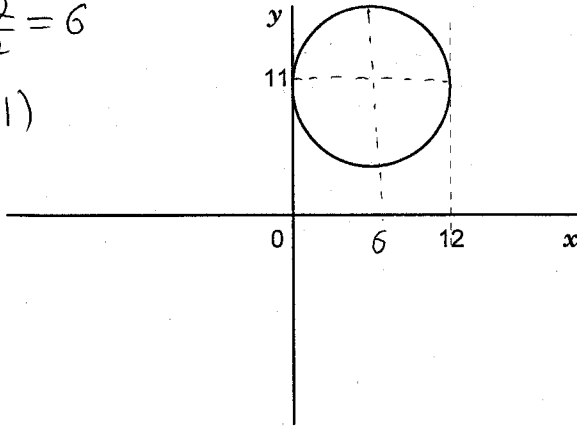
$$r = \sqrt{9+16} = \sqrt{25} = 5$$



h)  $(x+3)^2 + (y-2)^2 = 25$

$$r = \frac{12}{2} = 6$$

C(6, 11)

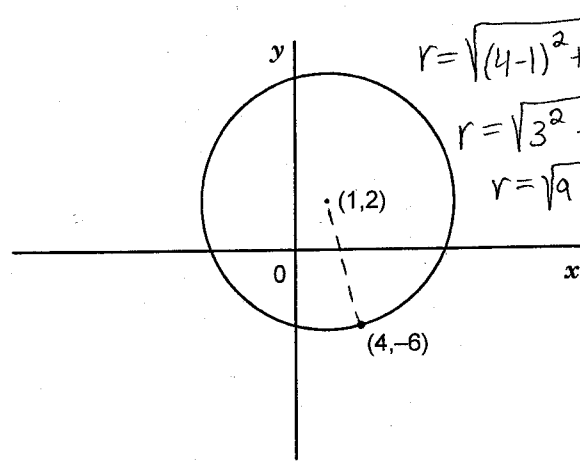


i)  $(x-6)^2 + (y-11)^2 = 36$

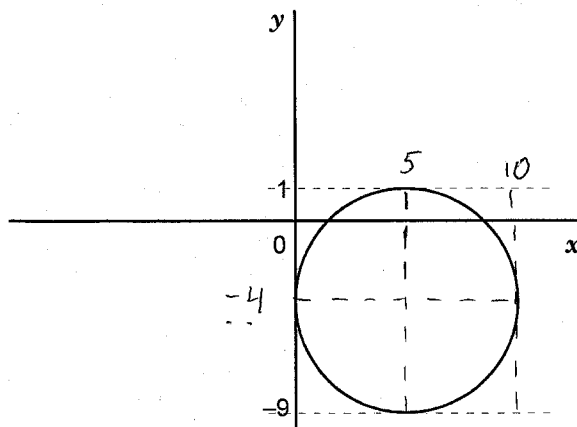
$$r = \sqrt{(4-1)^2 + (-6-2)^2}$$

$$r = \sqrt{3^2 + (-8)^2}$$

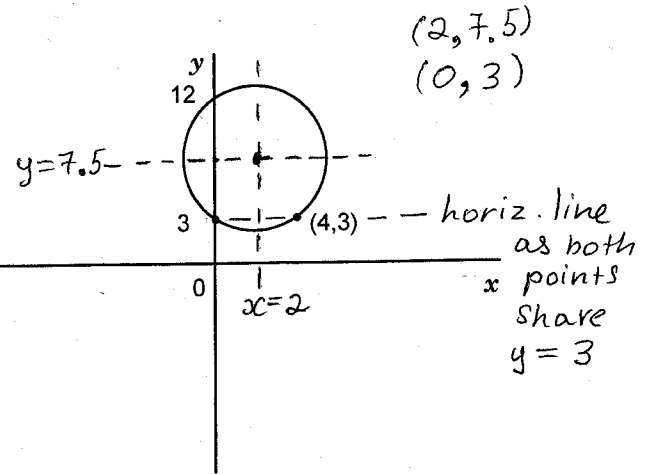
$$r = \sqrt{9+64} = \sqrt{73}$$



j)  $(x-1)^2 + (y-2)^2 = 73$



k)  $(x-5)^2 + (y+4)^2 = 25$



l)  $(x-2)^2 + (y-7.5)^2 = 24.25$