Circles (Coordinate Geometry) - Answers

Exercise A

1 **a** $(x-3)^2+(y-2)^2=16$
b $(x+4)^2+(y-5)^2=36$.
c $(x-5)^2+(y+6)^2=12$
d $(x-2a)^2+(y-7a)^2=25a^2$
e $(x+2\sqrt{2})^2+(y+3\sqrt{2})^2=1$

2 **a** $(-5,4)$, 9 **b** $(7,1)$, 4
c $(-4,0)$, 5 **d** $(-4a,-a)$, $12a$
e $(3\sqrt{5},-\sqrt{5})$, $3\sqrt{3}$

4 $(x-8)^2+(y-1)^2=25$

5 $(x-\frac{3}{2})^2+(y-4)^2=\frac{65}{4}$

6 $\sqrt{5}$

8 **a** $3\sqrt{10}$

9 **a** $(x-4)^2+(y-6)^2=73$ **b** $3x+8y+13=0$

10 **a** $(0,-17)$, $(17,0)$ **b** 144.5

Exercise B

1 $(7,0)$, $(-5,0)$

2 $(0,2)$, $(0,-8)$

3 $a=-2,8$ $b=-8,2$

4 $(6,10)$, $(-2,2)$

5 $(4,-9)$, $(-7,2)$

9 $(0,-2)$, $(4,6)$

10 **a** 13 **b** 1, 5