



Zadatak 10. Kružnica prolazi točkom A , a središte joj je točka S . Odredi jednadžbu kružnice ako je:

- 1) $A(2, -1)$, $S(6, 2)$; 2) $A(-3, 0)$, $S(5, -4)$;
 3) $A(0, 0)$, $S(-4, -4)$;
 4) $A(3, -5)$, $S(-5, 1)$.

Rješenje.

1) $A(2, -1)$, $S(6, 2)$, $p = 6$, $q = 2$
 $(2 - 6)^2 + (-1 - 2)^2 = r^2 \implies 16 + 9 = r^2 \implies r^2 = 25$
 $(x - 6)^2 + (y - 2)^2 = 25$;

2) $A(-3, 0)$, $S(5, -4)$, $p = 5$, $q = -4$
 $(-3 - 5)^2 + (0 + 4)^2 = r^2 \implies 64 + 16 = r^2 \implies r^2 = 80$
 $(x - 5)^2 + (y + 4)^2 = 80$;

3) $A(0, 0)$, $S(-4, -4)$, $p = -4$, $q = -4$
 $(0 + 4)^2 + (0 + 4)^2 = r^2 \implies 16 + 16 = r^2 \implies r^2 = 32$
 $(x + 4)^2 + (y + 4)^2 = 32$;

4) $A(3, -5)$, $S(-5, 1)$, $p = -5$, $q = 1$
 $(3 + 5)^2 + (-5 - 1)^2 = r^2 \implies 64 + 36 = r^2 \implies r^2 = 100$
 $(x + 5)^2 + (y - 1)^2 = 100$.