



10 sinf Algebradan 1 – BSB savollari

1. $y = -x^2 - 4x + 5$ funksiya uchun quyidagilarni aniqlang: **(5 ball)**

- 1) Parabola uchining koordinatalari;
- 2) Funksiyaning o'sish va kamayish oraliqlarini;
- 3) Funksiyaning eng katta qiymatini.

2. Agar $\operatorname{ctg} \alpha = -\sqrt{8}$ va $\frac{3\pi}{2} < \alpha < 2\pi$ bo'lsa, $\sin \alpha$, $\cos \alpha$ va $\operatorname{tg} \alpha$ lar qiymatini toping.

(5 ball)

3. Arifmetik progressiyaning beshinchi hadi 2 ga, qirqinchi hadi 142 ga teng. Bu progressiyaning:

- Birinchi hadini;
- Ayirmasini;
- Dastlabki 40 ta hadi yig'indisini toping. **(6 ball)**

4. Funksiyaning aniqlanish sohasi va qiymatlar to'plamini toping: **(4 ball)**

$$y = 5 - \sqrt{-x^2 - 8x + 9}$$

5. $f(x) = \frac{3}{7-2x}$ va $g(x) = 3x$ berilgan. $F = f - g + \frac{g}{f}$ funksiyani va bu funksiyaning $x = 2$ dagi qiymatini toping. **(5 ball)**