

Вариант 111

1. $\frac{3}{200}$
2. $\frac{\pi n}{2}, n \in \mathbb{Z}$
3. $\frac{14}{9}$
4. $\left[-\frac{3}{5}; -\frac{1}{2}\right) \cup \left(-\frac{1}{3}; +\infty\right)$
5. 1
6. $\frac{4}{3}, x = \frac{1}{\log_2 3 - 1}$
7. 1
8. $x = \frac{5}{9}, y = \frac{1}{9}$

Вариант 113

1. $-\frac{7}{288}$
2. $\frac{\pi n}{2}, n \in \mathbb{Z}$
3. $\frac{2}{9}$
4. $\left[\frac{1}{2}; \frac{2}{3}\right) \cup (1; +\infty)$
5. $\sqrt{3}$
6. $\frac{8}{7}, x = \frac{2}{1 - \log_2 5}$
7. $2 + \sqrt{7}$
8. $x = \frac{1}{6}, y = -\frac{1}{3}$

Вариант 112

1. $\frac{5}{164}$
2. $\frac{\pi}{4} + \pi n, n \in \mathbb{Z}$
3. $\frac{5}{4}$
4. $\left[-\frac{2}{3}; -\frac{1}{3}\right) \cup \left(-\frac{1}{4}; 1\right]$
5. 6
6. $\frac{1}{4}, x = \frac{\log_2 3 + 1}{1 - \log_2 3}$
7. $\frac{5 - \sqrt{15}}{2}$
8. $x = -\frac{1}{2}, y = -\frac{1}{12}$

Вариант 114

1. $\frac{1}{228}$
2. $-\frac{\pi}{4} + \pi n, n \in \mathbb{Z}$
3. $\frac{3}{4}$
4. $[-2; -1) \cup \left(-\frac{1}{4}; \frac{1}{3}\right]$
5. $2\sqrt{3}$
6. $\frac{5}{9}, x = \frac{\log_2 5 + 1}{\log_2 5 - 1}$
7. $\frac{3 - \sqrt{3}}{2}$
8. $x = -\frac{1}{4}, y = \frac{1}{4}$