

1. , , , 28. ,

2. , , 1 8. , 2.

3.
$$\sqrt{2x + \frac{7}{x^2}} + \sqrt{2x - \frac{7}{x^2}} < \frac{6}{x}.$$

4. ,
$$3 \operatorname{tg}^2 x + 3 \operatorname{ctg}^2 x + \frac{2}{\sin^2 x} + \frac{2}{\cos^2 x} = 19.$$
 $\sin^4 x - \sin^2 x.$

5. A . B
 A .
 . $\frac{20}{81} AB.$
 , (,), AB
 ? 1:5.

6. $PQRS$, $\angle PQR = 90^\circ$, $\angle QRS > 90^\circ$, SQ 24
 S , R QS 5.
 $PQRS$.

7. 2015 ,

8.
$$\begin{cases} x^2 - y^2 + z = \frac{27}{xy}, \\ y^2 - z^2 + x = \frac{27}{yz}, \\ z^2 - x^2 + y = \frac{27}{xz}. \end{cases}$$

