Quadratic Equations: Worksheet -2

1. The discriminate of $ax^2 + bx + c = 0$ is ______

2. The condition for the roots of $ax^2 + bx + c = 0$ to be equal is _____

3. Sum of roots of $4x^2 = 1$ is ______

4. If $b^2 - 4ac < 0$, the roots of $ax^2 + bx + c = 0$ are ______

5. The discriminate of $ax^2 - (a+b)x + b = 0$ is ______

6. If the difference of the roots of $x^2 - ax + b = 0$ is 1, then $a^2 = ---$

7. If roots of $x^2 - 6x + k = 0$ are in the ratio 1:2, then $k = \underline{} = \underline{} = \underline{}$

8. If r and s are roots of $ax^2 + bx + c = 0$, then $\frac{1}{r} + \frac{1}{s} = \frac{1}{r} + \frac{1}{r} + \frac{1}{s} = \frac{1}{r} + \frac$

9. The roots of $(x+2)^2 = 49$ are ______

10. If α, β are the roots of $ax^2 + bx + c = 0$ then the equation whose roots are $\frac{1}{\alpha}$ and $\frac{1}{\beta}$ are ______

11. If one root of $px^2 - 14x + 8 = 0$ is six times the other, then $p = _{---}$