Nature of Roots

Name _____

Score _____

RQ:24

For the quadratic equation $ax^2 + bx + c = 0$,

If $b^2 - 4ac > 0$, then the roots are real and unequal.

If $b^2 - 4ac = 0$, then the roots are real and equal.

If $b^2 - 4ac < 0$, then the roots are unreal(complex).

Find the nature of roots for each quadratic equation.

1) $7m^2 - m = 0$

2) $y^2 + 3y + 5 = 0$

3) $3k^2 + 2k - 3 = 0$

4) $4t^2 - t - 2 = 0$

5) $g^2 + 10g + 25 = 0$

6) $x^2 - 2x + 1 = 0$

7) $2n^2 - 9 = 0$

8) $5p^2 - p - 6 = 0$

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Answer key

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