Logarithm Algebra (Quotient Property) - To Quadratic (Coefficient N)

1 $\log_8(7n - 4) - \log_8(-2n + 5) = \log_8(1n)$

Use the quotient rule to simplify this to a quadratic of variable 'n'

A	B	C
$2n^2 + 3n - 7 = 0$	$2n^2 + 2n - 4 = 0$	$2n^2 + 4n + 1 = 0$

2 $\log_9(-10m + 5) - \log_9(m + 4) = \log_9(-5m)$

Use the quotient rule to simplify this to a quadratic of variable 'm'

A	B	C
$4m^2 + 9m + 3 = 0$	$5m^2 + 10m + 5 = 0$	$6m^2 + 10m + 6 = 0$

3 $\log_8(4y + 8) - \log_8(-1y + 7) = \log_8(2y)$

Use the quotient rule to simplify this to a quadratic of variable 'y'

A	B	C
$2y^2 - 10y + 8 = 0$	$3y^2 - 8y + 12 = 0$	$3y^2 - 10y + 9 = 0$

4 $\log_6(9r + 6) - \log_6(6r + 9) = \log_6(1r)$

Use the quotient rule to simplify this to a quadratic of variable 'r'

A	B	C
$-6r^2 - 1r + 5 = 0$	$-6r^2 + 0r + 6 = 0$	$-6r^2 - 2r + 6 = 0$

5 $\log_3(-11y - 1) - \log_3(-1y + 9) = \log_3(-1y)$

Use the quotient rule to simplify this to a quadratic of variable 'y'

A	B	C
$-1y^2 - 2y - 1 = 0$	$-2y^2 - 2y + 1 = 0$	$y^2 - 3y + 2 = 0$

6 $\log_7(-5y - 6) - \log_7(y + 10) = \log_7(-1y)$

Use the quotient rule to simplify this to a quadratic of variable 'y'

A	B	C
$y^2 + 7y - 6 = 0$	$y^2 + 5y - 6 = 0$	$y^2 + 3y - 9 = 0$

7 $\log_2(-10z + 8) - \log_2(-4z + 6) = \log_2(-1z)$

Use the quotient rule to simplify this to a quadratic of variable 'z'

A	B	C
$-3z^2 - 3z + 12 = 0$	$-4z^2 - 6z + 8 = 0$	$-4z^2 - 4z + 8 = 0$

8 $\log_9(-5n + 6) - \log_9(-1n + 2) = \log_9(1n)$

Use the quotient rule to simplify this to a quadratic of variable 'n'

A	B	C
$2n^2 - 8n + 9 = 0$	$n^2 - 5n + 3 = 0$	$n^2 - 7n + 6 = 0$