



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

$${}^1\log_2(10r + 1) - \log_2(r + 10) = \log_2(1r) \quad {}^2\log_2(7r - 5) - \log_2(-1r + 11) = \log_2(1r)$$

Use the quotient rule to simplify this to a quadratic and solve for 'r'

Use the quotient rule to simplify this to a quadratic and solve for 'r'

A $r = 3$	B $r = 1$	C $r = -8$	A $r = 5$	B $r = 12$	C $r = 9$
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$${}^3\log_8(9t + 9) - \log_8(t + 5) = \log_8(3t) \quad {}^4\log_4(-11z + 2) - \log_4(-2z + 11) = \log_4(-1z)$$

Use the quotient rule to simplify this to a quadratic and solve for 't'

Use the quotient rule to simplify this to a quadratic and solve for 'z'

A $t = 1$	B $t = 5$	C $t = 9$	A $z = -10$	B $z = 6$	C $z = -1$
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$${}^5\log_2(7q - 4) - \log_2(-1q + 7) = \log_2(1q) \quad {}^6\log_9(-1q + 6) - \log_9(q - 2) = \log_9(1q)$$

Use the quotient rule to simplify this to a quadratic and solve for 'q'

Use the quotient rule to simplify this to a quadratic and solve for 'q'

A $q = 8$	B $q = -3$	C $q = 2$	A $q = 6$	B $q = -3$	C $q = 3$
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$${}^7\log_2(-1r + 8) - \log_2(-4r + 5) = \log_2(-1r) \quad {}^8\log_7(-4m + 8) - \log_7(8m - 4) = \log_7(1m)$$

Use the quotient rule to simplify this to a quadratic and solve for 'r'

Use the quotient rule to simplify this to a quadratic and solve for 'm'

A $r = 3$	B $r = -1$	C $r = 4$	A $m = 8$	B $m = 1$	C $m = 7$
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