

Logarithms WS #1

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Solve each equation. REMEMBER TO CHECK YOUR ANSWERS!!

1) $\log_3 -5x = \log_3 (5x + 3)$

2) $\log_4 (-r + 6) = \log_4 (-2r - 6)$

3) $\log_{18} (2n - 1) = \log_{18} (5n - 4)$

4) $\log_2 (-5x + 8) = \log_2 x$

5) $\log_8 24 = \log_8 (b + 6)$

6) $\log_6 (2v - 5) = \log_6 (v + 7)$

7) $\log (4 - 3n) = \log (-5n + 6)$

8) $\log_9 (4a - 9) = \log_9 (a + 2)$

$$9) \log_{15} (-6n - 3) = \log_{15} (n^2 + 2)$$

$$10) \log_{17} (3n^2 - 3n) = \log_{17} (40 + 2n^2)$$

$$11) \log_7 (9 - m) = \log_7 (m^2 - 9m)$$

$$12) \ln (3x^2 + 11x) = \ln (-28 + 2x^2)$$

$$13) \log_{13} (-45 + k^2) = \log_{13} (2k^2 + 14k)$$

$$14) \log_3 (-7p - 1) = \log_3 (p^2 - 19)$$

$$15) \log_{18} (x^2 + 57) = \log_{18} (-16x - 3)$$

$$16) \log_2 (x^2 + 4x) = \log_2 (15 + 2x)$$