

Logarithmic Equations**Same Base**

1. $\log_3(2x - 1) + \log_3(x + 1) = \log_3(2)$

2. $\log_3(x) + \log_3(x + 1) = \log_3(42)$

3. $\log_{10}(x) + \log_{10}(x - 1) = \log_{10}(6)$

4. $\log_2(x + 3) + \log_2(x - 1) = \log_2(12)$

5. $\log_5(x) + \log_5(x + 1) = \log_5(20)$

6. $\log_8(x + 3) + \log_8(x + 2) = \log_8(6)$

7. $\log_5(t) + \log_5(t + 6) = \log_5(72)$

8. $\log_2(x) + \log_2(x - 1) = \log_2(6)$

9. $\log_3(2x - 1) + \log_3(2x) = \log_3(2)$

10. $\log_2(2x) + \log_2(2x + 1) = \log_2(2)$

Answers

Logarithmic Equations

Same Base

1. $x = 1$

2. $x = 6$

3. $x = 3$

4. $x = 3$

5. $x = 4$

6. $x = 0$

7. $t = 6$

8. $x = 3$

9. $x = 1$

10. $x = \frac{1}{2}$