

5.5 & 5.6 Solving log equations and exponential equations

Solve the following equations

rounded answers

<p>1.</p> $\log_2(8x) - \log_2(x^2 - 1) = \log_2 3$ <p style="text-align: right;">$x = 3$</p>	<p>2.</p> $\log(2x - 3) + \log(x - 2) = 2 \log x$ <p style="text-align: right;">$x = 6$</p>
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3) $\log_4(x + 6) + \log_4 x = 2$

$x = 2$

5) $\log_7 6 - \log_7 4x = 1$

$x = 3/14$

4) $\log_4(x + 3) - \log_4 x = 1$

$x = 1$

6) $\log_5 8 - \log_5 2x = 2$

$x = 1/25$

estimated ans.

~~7) $e^{b-3} = 6$~~

8) $13^{-9n} = 58$

9) $16^{-7x} = 72$

~ -0.176
10) $7^{-8a} + 10 = 95$

~ -0.220
~~11) $-8.4e^{n+2.7} = -15$~~

~ 0.285
12) $15^{x-8} + 5 = 62$

~ 9.493