Algebra HW #12 Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

IV. Rewrite each equation in logarithmic form. VI. Rewrite each equation in exponential form.

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| --- | --- | --- | --- |
| 1.  | 2.  | 3.  | 4.  |

V. Evaluate each logarithm WITHOUT the calculator. May be helpful to convert to exponential form first.

|  |  |  |  |
| --- | --- | --- | --- |
| 5. = x | 6. = x | 7.  | 8.  |
| 9.  | 10.  | 11.  | 12.  |

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Solve each Equation for x.

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| 13.  | 14.  | 15.  |

Write as a single log. Simplify if possible.

|  |  |  |
| --- | --- | --- |
| 16.  | 17. $log\_{3}\left(27\right)- log\_{3}(18)$ | 18. $log\_{4}\left(16\right)-\left(log\_{4}\left(64\right)+log\_{4}\left(32\right)\right)$ |

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