Assignment 9

1. The following Log Formulae are true:

   \[ \log_a (xy) = \log_a x + \log_a y \]

2. The following Log Formulae are true:

   \[ \log_a \left(\frac{x}{y}\right) = \log_a x - \log_a y \]

3. The following Log Formulae are true:

   \[ \log_a x^n = n \log_a x \]

4. The following Log Formulae are true:

   \[ \log_a b = \frac{1}{\log_b a} \]

5. The following Log Formulae are true:

   \[ \log_a x = \log_b x \cdot \log_a b \]

6. The following Log Formulae are true:

   \[ \log_a x = \frac{1}{\log_x a} \]

7. The following Log Formulae are true:

   \[ \log_a x = \frac{\log_b x}{\log_b a} \]

8. The following Log Formulae are true:

   \[ \log_a x = \frac{1}{\log_x a} \]

9. The following Log Formulae are true:

   \[ \log_a x = \frac{1}{\log_x a} \]

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    \[ \log_a x = \frac{1}{\log_x a} \]

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    \[ \log_a x = \frac{1}{\log_x a} \]