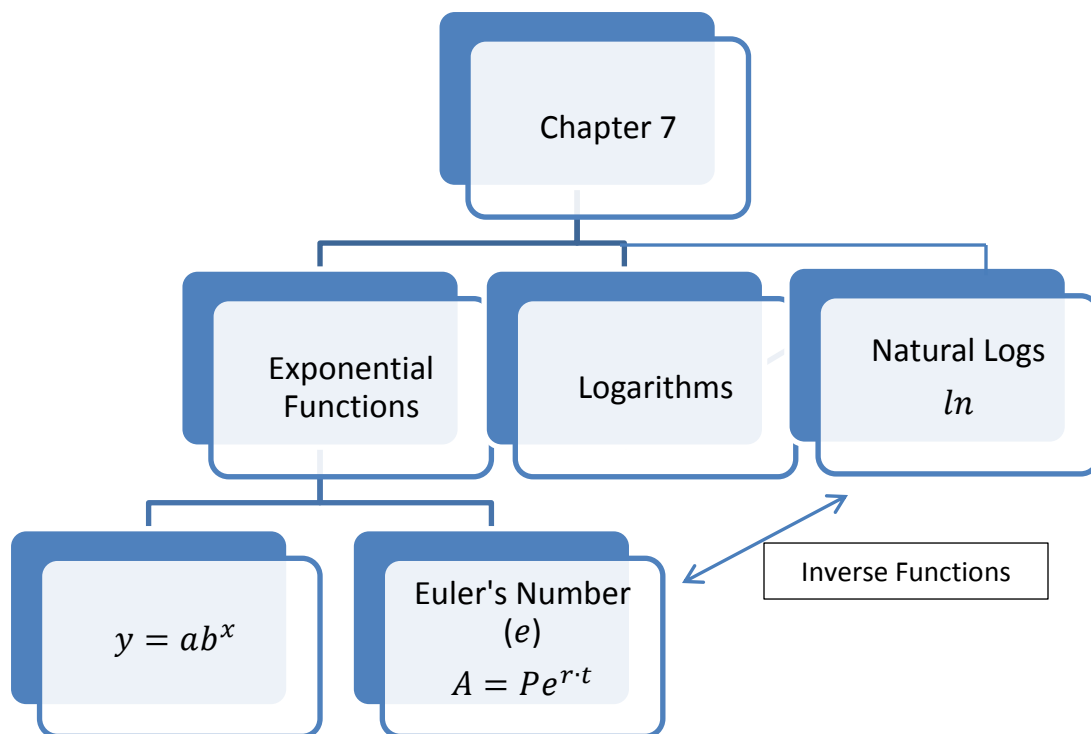


7.6 Natural Logarithms (ln) Notes



*Remember you cannot take the \log or \ln of a negative.

Examples ~ Solve for x . Round to 4 decimal places.

1. $5e^{3x} = 18$

.4270

2. $e^x + 1 = 5$

1.3863

3. $\ln(2x + 4) = 3$

8.043

4. $\ln(3x + 5) = 4$

16.5327

*Product/Quotient/Power Properties Apply to Natural Logs.

5. $\ln x + \ln 4 = 6$

100.8572

6. $\ln 8 - \ln x = \ln 2$

4

Practice: p. 481 #20-38 even, 42-51. Use the information below for # 38.

Space A spacecraft can attain a stable orbit 300 km above Earth if it reaches a velocity of 7.7 km/s.