

Name: _____

Date: _____

Learning Goal 8.1Solving exponential and logarithmic equations with same base and with different bases, including base e .**More Questions**

Power Law	Product Law	Quotient Law	Change of Base

1. Solve for x . Round your answers to the nearest hundredth.

a. $2^z = 2500$

b. $5^{x-3} = 1700$

c. $8(3^{2x}) = 568$

d. $6^{3x+1} = 8^{x+3}$

e. $4(7^{x+2}) = 9^{2x-3}$

2. Find the half – life of an isotope if 10 grams of a 150 gram sample remains after 21.9 days.