Lesson 7.3 Practice: Exponential Models

School Launch · Algebra II · Unit 7: Exponential Functions · Worksheet A

Calculator for decimals

Name _____ Date _____ Score _____ / 10

Show your work under each problem, one step per line, and check your answer. Word problems: name the unknown, write the equation, solve, and answer in a sentence with units.

1. An exponential model $y = ab^x$ passes through $(2, 120)$ and $(5, 960)$. Find a and b. EASY

2. An exponential model $y = ab^x$ passes through $(2, 360)$ and $(4, 1440)$. Find a and b. EASY

3. An exponential model $y = ab^x$ passes through $(2, 900)$ and $(4, 8100)$. Find a and b. EASY

4. An exponential model $y = ab^x$ passes through $(3, 640)$ and $(4, 1280)$. Find a and b. MEDIUM

5. An exponential model $y = ab^x$ passes through $(1, 600)$ and $(2, 1800)$. Find a and b. MEDIUM

6. An exponential model $y = ab^x$ passes through $(1, 510)$ and $(3, 4590)$. Find a and b. MEDIUM

7. An exponential model $y = ab^x$ passes through $(1, 540)$ and $(2, 1620)$. Find a and b. MEDIUM

8. An exponential model $y = ab^x$ passes through $(3, 560)$ and $(6, 4480)$. Find a and b. HARD

9. An exponential model $y = ab^x$ passes through $(3, 2970)$ and $(6, 80190)$. Find a and b. HARD

10. An exponential model $y = ab^x$ passes through $(2, 680)$ and $(4, 2720)$. Find a and b. HARD