

Lesson 7 Solving Exponential Equations

Ex. 1) Solve.

a) $4^x = 12$

Steps (Without a Common Base):

1. Apply logarithms to both sides.
2. Apply the laws of logarithms.
3. Solve for x
4. Evaluate logs with calculator
(last step only)

b) $2(3^x) = 5$

c) $3^{x+1} = 6^x$

d) $19^{x-5} = 3^{x+2}$

e) $2(7)^x = 3^{2x-3}$