Name _____ Date _____

6.6 Puzzle Time

Why Do Elephants Have Big Trunks?

A	B	C	D	E	F
G	H	I	J	K	L

Complete each exercise. Find the answer in the answer column. Write the word under
the answer in the box containing the exercise letter.

−2
THE
−6
SHOPPING
$-\dfrac{2}{3}$
HAVE
−1
GO
2
TO
−100
GROCERIES

Solve the equation.

A. $5^{3-2x} = 5^{-x}$

B. $3^{2x} = 3^{-x}$

C. $3^{-2x+1} \cdot 3^{-2x-3} = 3^{-x}$

D. $10^{1-x} = 10^4$

E. $3^{2x-1} = 27$

F. $4^{x+1} = \dfrac{1}{64}$

G. $\log_3(x + 3) = 0$

H. $\log(-x) + 2 = 4$

I. $\log_3(x - 3) = 4$

J. $2\log_7(-2x) = 0$

K. $\log(-2x + 9) = \log(7 - 4x)$

L. $\log_{12}(x^2 + 35) = \log_{12}(-12x - 1)$

0
THEY
$-\dfrac{1}{2}$
THEY
−4
PUT
−3
SOMEWHERE
84
WHEN
3
SO