3-2 Activity

Note: active Learning 7.3 HW #14: Given graphs of f, g, select graph of f(g(x)).

Can an even function be invertible? Can an odd function? (always/sometimes/never)

FM: 4.2: Show even/odd with graphs, formulas, tables.

4.4: Fill in table of inverse function given f(x). Show two functions are inverses (one rational). Dom/rng (for later).

S-Z; p. 383: Graph with VA/HA invertible. Several algebraically showing f is inverse of f^(-1) and vice versa.

Active Learning 7.3 HW #17-18: Graph/table of f. Find various values of f^(-1)

Active Learning: 7.3 #42:

At a company, the human resources department keeps information about their employees in table form. If an office specialist enters the name of an employee, a function ff will output that employee's ID Number. If they enter an employee's ID Number, then various functions can be used:

* Function WW will output that employee's current hourly wage (in dollars).
* Function DD will output that employee's date of hire.
* Function NN will output that employee's name.

1. Write a composition to find employee Nallely Garcia's date of hire.
2. Write a composition to find employee David Smith's hourly wage.
3. What is f(N(1435))?f(N(1435))? Explain how you know.
4. Which of the functions (f,f, W,W, DD and NN) are *invertible*? Explain your choices, using examples if possible.

Active Learning 7.3 #36: Your company has a fleet of vehicles that transport goods around the metropolitan area. You use the following functions:

* V(w) represents the number of miles your moving vans drive in week w
* T(w) represents the number of miles your moving trucks drive in week w
* A(m) represents the cost of fuel for driving your moving vans m miles
* B(m) represents the cost of fuel for driving your moving trucks m miles

1. Which expression represents the total cost of fuel for your moving vans and trucks in week w?

Answer:

?

A(V(w)) + B(T(w))

V(w) + T(w)

T(V(w)) + B(A(m))

V(w)T(w)

1. Which expression represents the total number of miles driven for your moving vans and trucks in week w?

Answer:

?

V(T(w)) + T(V(w))

V(A(m))

V(w)T(w)

V(w) + T(w)

APC: p. 80 #1-6 Inverse functions in context (mult. choice meanings)

#8-9 Find t as function of V. Interpret AV of both f, f inverse in context.

MFG: 5.1 HW #5-9: stories and interpretations of inverse values.

MFG 5.1: #35, 43-46: Match graph of function to inverse, 1/f, etc..