

FLOWCHART

1. Design a flowchart explaining how to find the inverse of a function.
2. Design a flowchart explaining how to find the function if you know its inverse.

Be sure to include the following details:

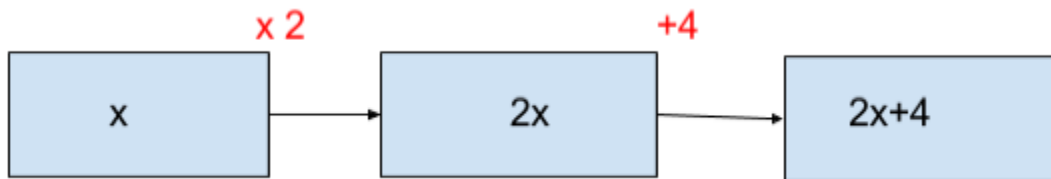
- Answer the question, “Do all functions have an inverse?”
- Include at least three examples within your flowchart.
- Use appropriate notation and use it correctly.
- Use appropriate terminology effectively.

You may find it useful to use Microsoft Word or Glogster. Both of these programs (along with many others) have flowchart clipart built in to their software.

Answer Key

1. Design a flowchart explaining how to find the inverse of a function.

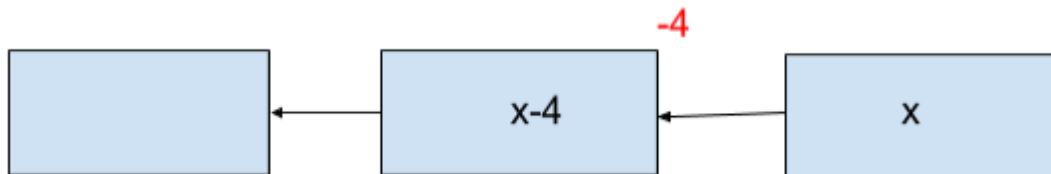
Find the inverse function of $f(x) = 2x + 4$.



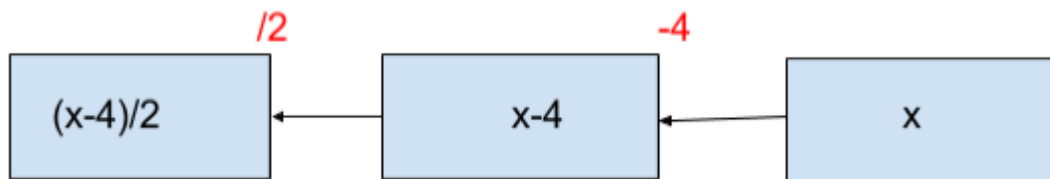
To find the inverse function, we need to go backtrack, starting with x.



Do opposite operation of +4, and that would be -4.



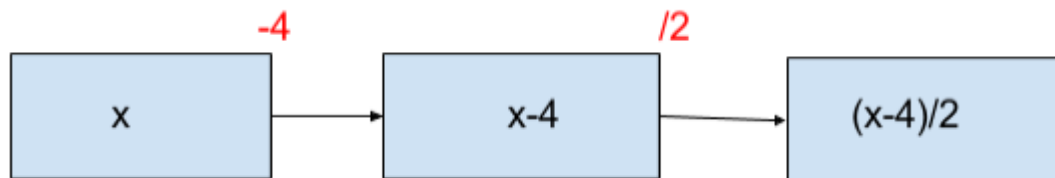
Do opposite operation of x2, and that would be /2.



The inverse function of $f(x) = 2x + 4$ would be $f^{-1}(x) = \frac{x-4}{2}$.

2. Design a flowchart explaining how to find the function if you know its inverse.

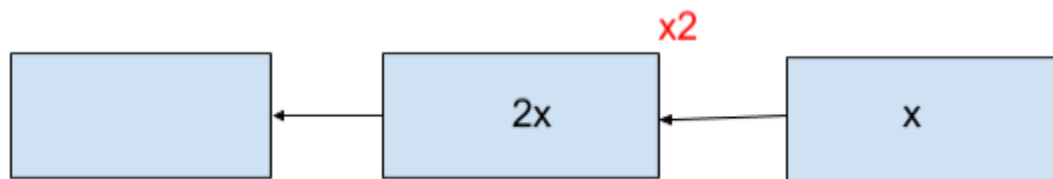
Find the function, if its inverse is $f^{-1}(x) = \frac{x-4}{2}$.



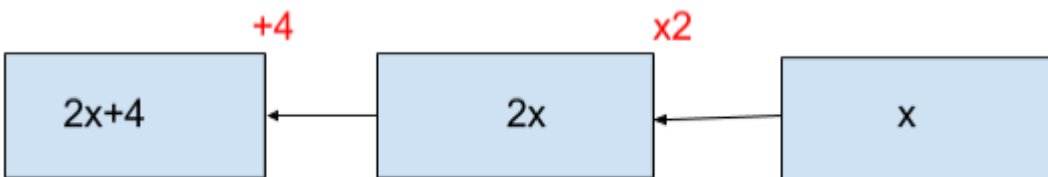
To find the function, we need to go backtrack, starting with x.



Do opposite operation of /2, and that would be x2.



Do opposite operation of -4 , and that would be $+4$.



The function is $f(x) = 2x + 4$