

Need help with a circuit

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I need a circuit that can perform the following

```
if (x < -1)
x = 0
else if (x < 1)
x = sqrt(1 - (x^2))
else
x = 0
```

Now what I have done so far is the comparisons and have three comparators so at a given x the appropriate values are given (1, -1, 0). I have taken care of the square root, minus, and the square part as well.

So, does anyone know what I use and how to do the if then else parts? 3 outputs and only one is needed at the input to the rest of the circuit. I don't want a specialized ic for this so its just or, not, and, xor, etc...

Thank you. :)