WITHOUT USING THE CALCULATOR… sketch a graph of the function.

$$f(x) = -2(x-4)(x+1)(x-2)$$

x-intercepts:

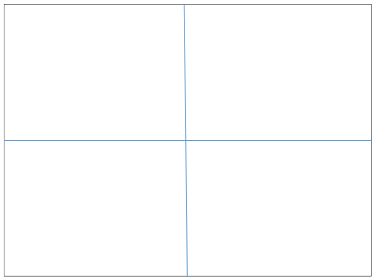
multiplicities?

Number of Directions:

R.E.B.:

L.E.B.:

y-intercept:



Check with your calculator.

WITHOUT USING THE CALCULATOR… sketch a graph of the function.

$$f(x) = \frac{1}{3}(x-6)(x-1)(x+3)(x-3)$$

x-intercepts:

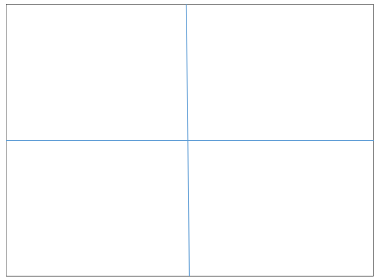
multiplicities?

Number of Directions:

R.E.B.:

L.E.B.:

y-intercept:



Check with your calculator.

WITHOUT USING THE CALCULATOR… sketch a graph of the function.

$$f(x) = 3(x-2)(x+1)^2$$

x-intercepts:

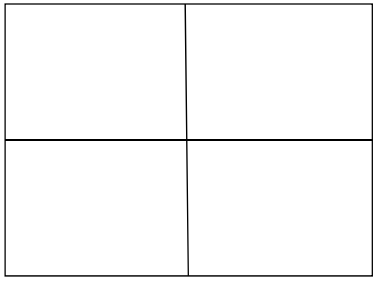
multiplicities?

Number of Directions:

R.E.B.:

L.E.B.:

y-intercept:



Check with your calculator.

WITHOUT USING THE CALCULATOR… sketch a graph of the function.

$$f(x) = \frac{3}{4}x(x+4)(x-2)(x-5)$$

x-intercepts:

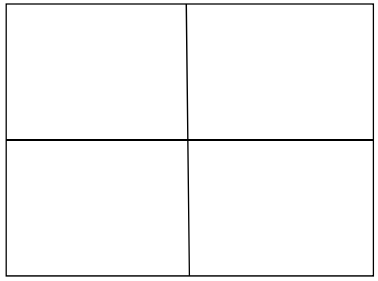
multiplicities?

Number of Directions:

R.E.B.:

L.E.B.:

y-intercept:



Check with your calculator.

WITHOUT USING THE CALCULATOR… sketch a graph of the function.

$$f(x) = (x+3)^2(x+1)^3$$

x-intercepts:

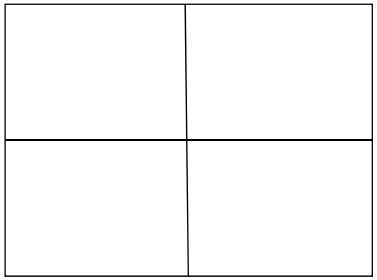
multiplicities?

Number of Directions:

R.E.B.:

L.E.B.:

y-intercept:



Check with your calculator.

WITHOUT USING THE CALCULATOR… sketch a graph of the function.

$$f(x) = -x^2(x+3)(x-1)$$

x-intercepts:

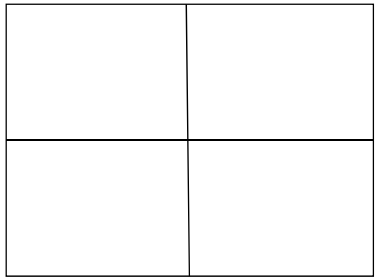
multiplicities?

Number of Directions:

R.E.B.:

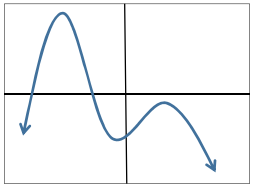
L.E.B.:

y-intercept:

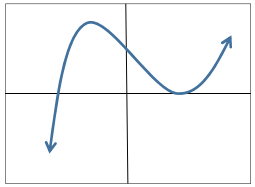


Check with your calculator.

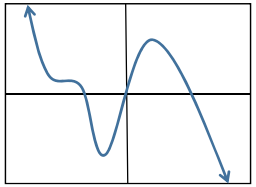
Determine the most likely degree for each polynomial.



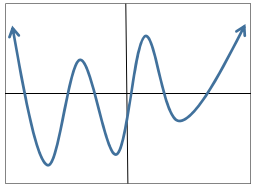
Deg: ___



Deg: ___



Deg: ___



Deg: ___

Find the x-intercepts, right end behavior, and y-intercept to write the equation for the function.

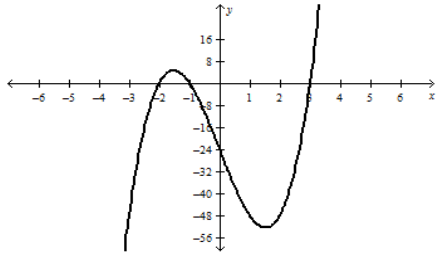
x-intercepts: ____ , _____ , _____

Factors: (_____)(_____)(_____)

y-intercept: _____

Plug in: ____= *a* (_____)(_____)(_____)

Solve for *a* :



So *a* = _____

Equation: y = _____