1. What are the solutions of (3x+9)(x-4) =0?
2. Write the function in standard form:

 f(x)= -5(x  4) (x – 2)

1. Write  in factored form if its zeros are ,  and *k* is -4.

**Graph the following quadratics below**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| $$f\left(x\right)=-\left(x+1\right)^{2}+4$$Vertex:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Two points:

|  |  |
| --- | --- |
| X | Y |
|  |  |
|  |  |

Domain:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Range:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | $$f\left(x\right)=2x^{2}-4x-2$$Vertex:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Two points:

|  |  |
| --- | --- |
| X | Y |
|  |  |
|  |  |

Domain:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Range:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| $$f\left(x\right)=-\frac{1}{2}(x+2)(x+4)$$Vertex:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Domain:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Range:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | $$f\left(x\right)=3(x-1)(x+1)$$Vertex:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Domain:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Range:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |