**QUADRATIC FUNCTIONS**

* A function whose highest power is two (2).
* It is written in the form :

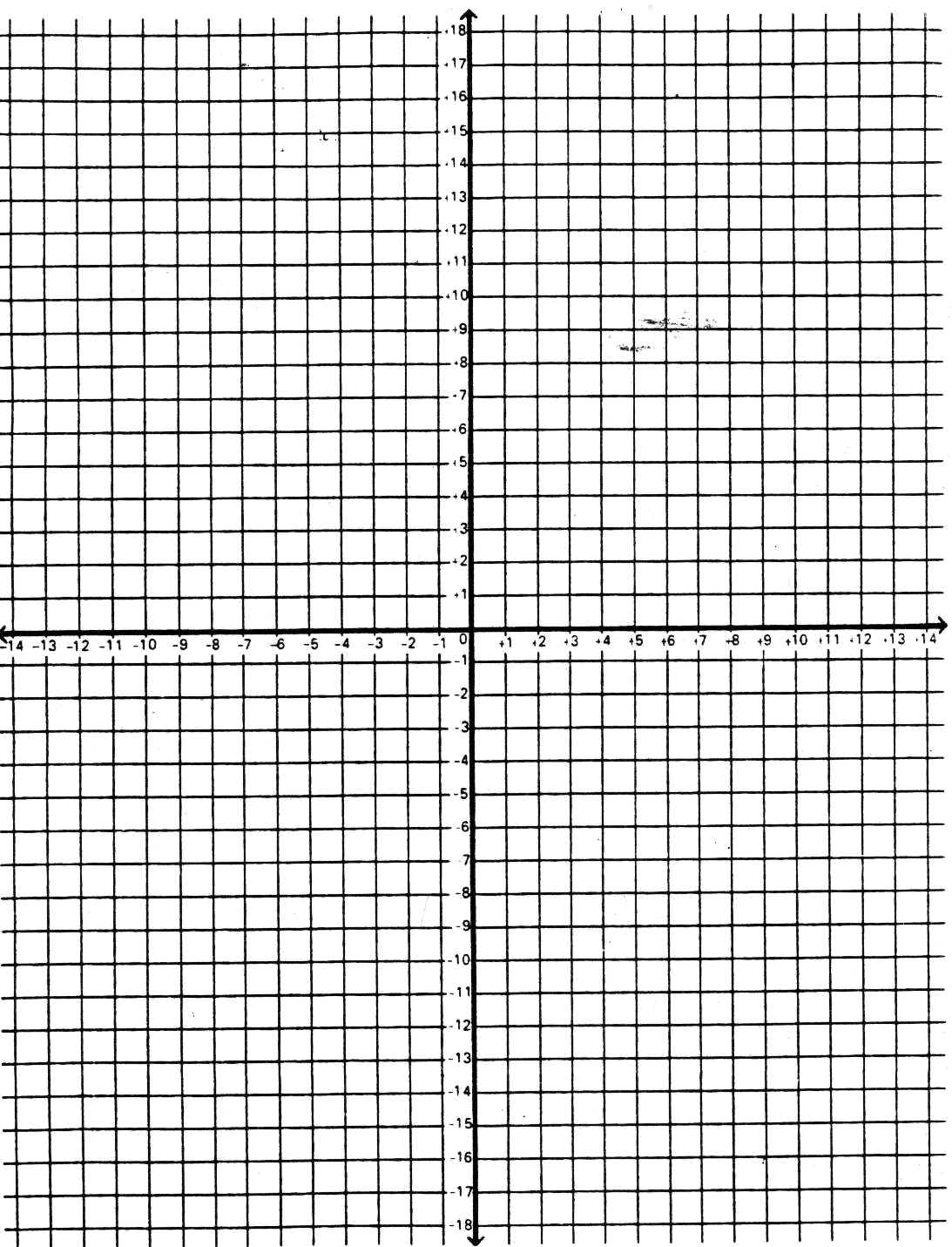
1. The effect of the in

Complete the table below:

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **-3** | **-2** | **-1** | **0** | **1** | **2** | **3** |
|  | 9 | 4 | 1 | 0 | 1 | 4 | 9 |
|  | 4,5 | 2 | 0,5 | 0 | 0,5 | 2 | 4,5 |
|  | 18 | 4 | 2 | 0 | 2 | 4 | 18 |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |

**EXERCISE**

1. Copy and complete the table above.
2. Using different colours plot the six(6) functions on the Cartesian plane like the one below:
3. What do you notice?



The effect of thein

Complete the table below:

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **-3** | **-2** | **-1** | **0** | **1** | **2** | **3** |
| 2 | 11 | 6 | 3 | 2 | 3 | 6 | 11 |
|  | 7 | 2 | -1 | -2 | -1 | 2 | 7 |
|  | 9 | 4 | 1 | 0 | 1 | 4 | 9 |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |

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1. Copy and complete the table above.
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