**#6 THE DISCRIMINANT**

**Example Problems**  1.) x2 – 5x – 14 = 0 2.) 2x2 + x – 5 = 0

THE DISCRIMINANT!

3.) x2 – 10x + 25 = 0 4.) 4x2 – 9x + 7 = 0

**Discriminant Chart**

|  |  |  |
| --- | --- | --- |
| **Value of Discriminant** | **Type and Number of Roots** | **Sample Graph of Related Function** |
| D>0 (+) and D is a  \_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_ |  |  |
| D>0 (+) and D NOT a  \_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_ |  |  |
| D = 0 |  |  |
| D<0 ( ─ ) |  |  |

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