**Zuordnungen – Funktionen IV**

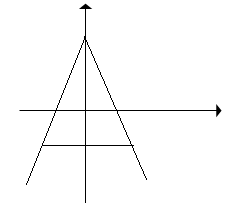
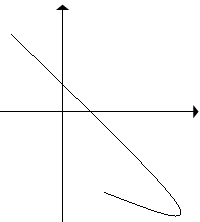
1. Aufgabe: Stelle folgende Funktionen mit Hilfe des Graphen und der Tabelle dar.

Gib die Zahlmenge für die Definitions- und Wertemenge a, wenn G = ℚ

|  |  |
| --- | --- |
| a) x → 2x - 1 | b → 1,5 b + 1 |
| |  |  |  |  |  | | --- | --- | --- | --- | --- | | X | -1 | 0 | 1 | 2 | | y | -3 | -1 | 1 | 3 | | |  |  |  |  |  | | --- | --- | --- | --- | --- | | X | -1 | 0 | 1 | 2 | | y | -0,5 | 1 | 2,5 | 4 | |
| Graph: | Graph: |

2. Aufgabe: Sind folgende Graphen jeweils Funktionen? Kreuze an!

a) b)

ja nein x ja nein x

3. Aufgabe: Welcher Punkt gehört zum Graphen der gegebenen

Funktion? Kreuze an!

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| a) f(x) = x - 2 | | | | | | | | | | | |
| A (1|1) | | B (4|- 8) | | C (12|0) | | D (1|-2,5) | | E (1|0) | | F (1|- 1) | |
| ja | nein | ja | nein | ja | nein | ja | nein | ja | nein | ja | nein |
|  | **x** |  | **x** |  | **x** |  | **x** |  | **x** | **x** |  |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| b) f(x) = 2x - 1 | | | | | | | | | | | |
| A (1|1) | | B (4|- 8) | | C (12|0) | | D (1|-2,5) | | E (1|0) | | F (1|- 1) | |
| ja | nein | ja | nein | ja | nein | ja | nein | ja | nein | ja | nein |
| **x** |  |  | **x** |  | **x** |  | **x** |  | **x** |  | **x** |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| c) f(x) = -3x + 4 | | | | | | | | | | | |
| A (1|1) | | B (4|- 8) | | C (12|0) | | D (1|-2,5) | | E (1|0) | | F (1|- 1) | |
| ja | nein | ja | nein | ja | nein | ja | nein | ja | nein | ja | nein |
| **x** |  | **x** |  |  | **x** |  | **x** |  | **x** |  | **x** |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| d) f(x) = 0,5x - 6 | | | | | | | | | | | |
| A (1|1) | | B (4|- 8) | | C (12|0) | | D (1|-2,5) | | E (1|0) | | F (1|- 1) | |
| ja | nein | ja | nein | ja | nein | ja | nein | ja | nein | ja | nein |
|  | **x** |  | **x** | **x** |  |  | **x** |  | **x** |  | **x** |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| e) f(x) = 0,75x - 0,75 | | | | | | | | | | | |
| A (1|1) | | B (4|- 8) | | C (12|0) | | D (1|-2,5) | | E (1|0) | | F (1|- 1) | |
| ja | nein | ja | nein | ja | nein | ja | nein | ja | nein | ja | nein |
|  | **x** |  | **x** |  | **x** |  | **x** | **x** |  |  | **x** |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| f) f(x) = 2,5x - 5 | | | | | | | | | | | |
| A (1|1) | | B (4|- 8) | | C (12|0) | | D (1|-2,5) | | E (1|0) | | F (1|- 1) | |
| ja | nein | ja | nein | ja | nein | ja | nein | ja | nein | ja | nein |
|  | **x** |  | **x** |  | **x** | **x** |  |  | **x** |  | **x** |