

## LGS und Geraden

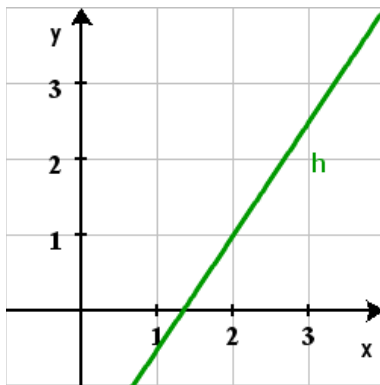
### LGS lösen

Für jede Aufgabe ergibt sich aus der linearen Gleichung der dargestellten Geraden und der angegebenen Gleichung ein LGS.

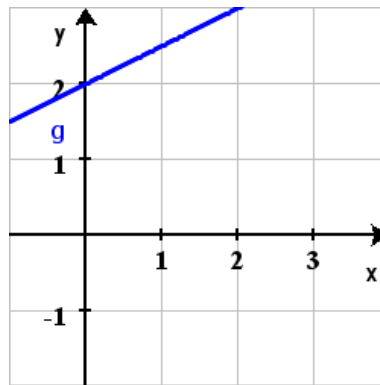
Bestimmen Sie die Lösungsmengen dieser LGS.

$x \in \mathbb{R}$

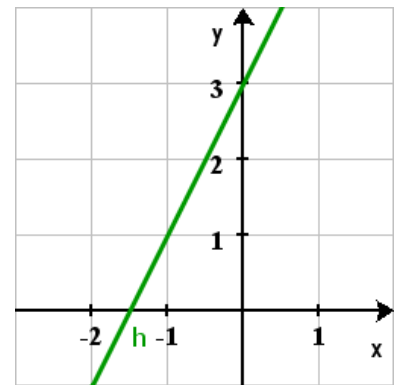
A)  $g: y = -x + 3$



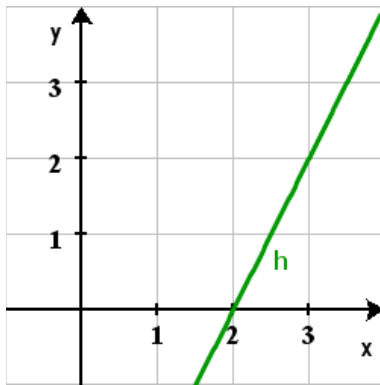
C)  $h: x = 2y + 4$



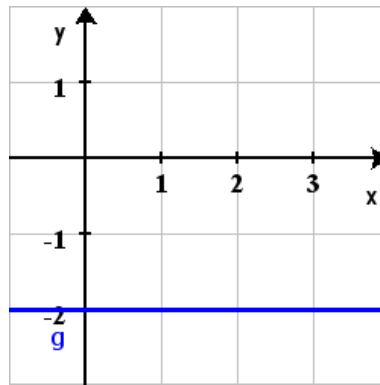
E)  $g: 9 = 3y - 6x$



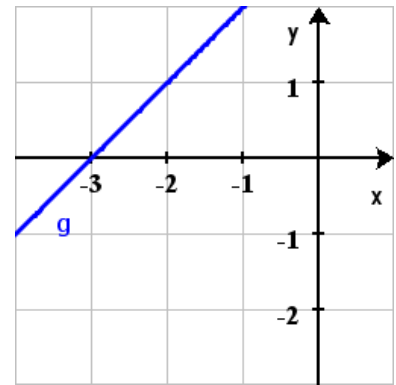
B)  $g: 1 = 2y - x$



D)  $h: 0 = 4x + 3y - 6$

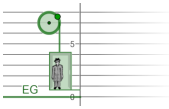


F)  $h: 2x = -y - 3$



Kontrollieren Sie Ihre Ergebnisse mit dem Bandolino.

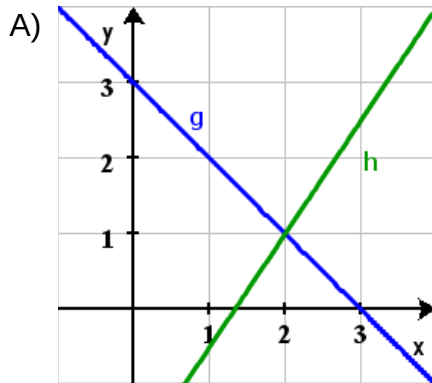




## Lösungen zu LGS und Geraden

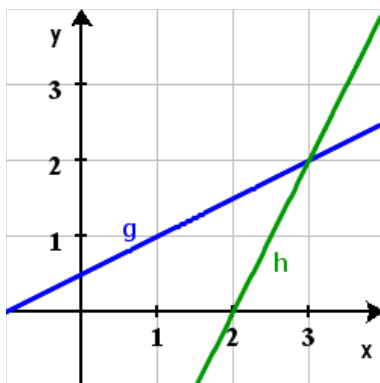
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### Lösungswege



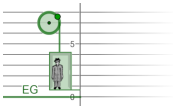
⇒ Lösungsmenge  $L = \{(2|1)\}$

B)  $g: y = \frac{1}{2}x + \frac{1}{2}$



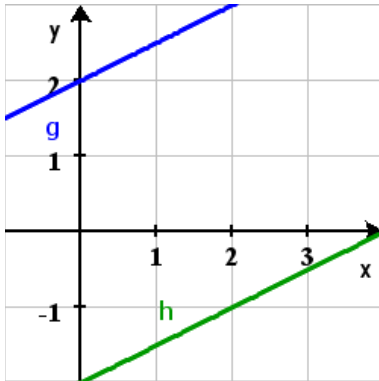
⇒ Lösungsmenge  $L = \{(3|2)\}$





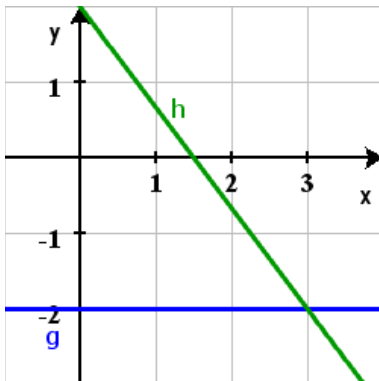
# lineare Gleichungen

C)  $g: y = \frac{1}{2}x - 2$



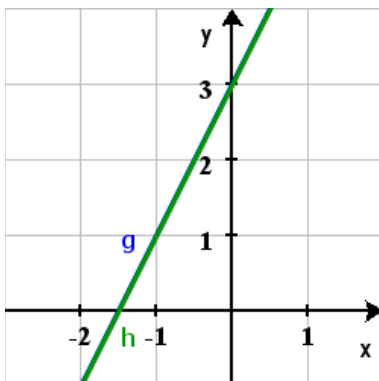
die Geraden  $g$  und  $h$  sind parallel  $\Rightarrow$  Lösungsmenge  $L = \emptyset$

D)  $h: y = -\frac{4}{3}x + 2$



$\Rightarrow$  Lösungsmenge  $L = \{(3|-2)\}$

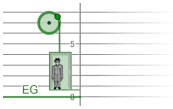
E)  $g: y = 2x + 3$



die Geraden  $g$  und  $h$  liegen aufeinander

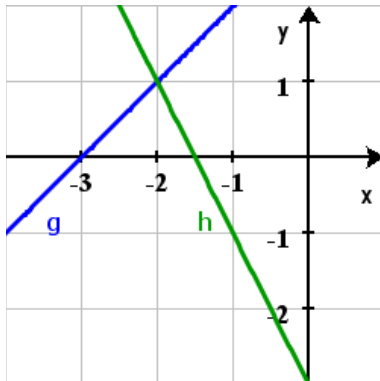
$\Rightarrow$  Lösungsmenge  $L = \{(x|y) \mid x \in \mathbb{R} \wedge y = 2x + 3\}$





# lineare Gleichungen

F)  $h: y = -2x - 3$



⇒ Lösungsmenge  $L = \{(-2|1)\}$

