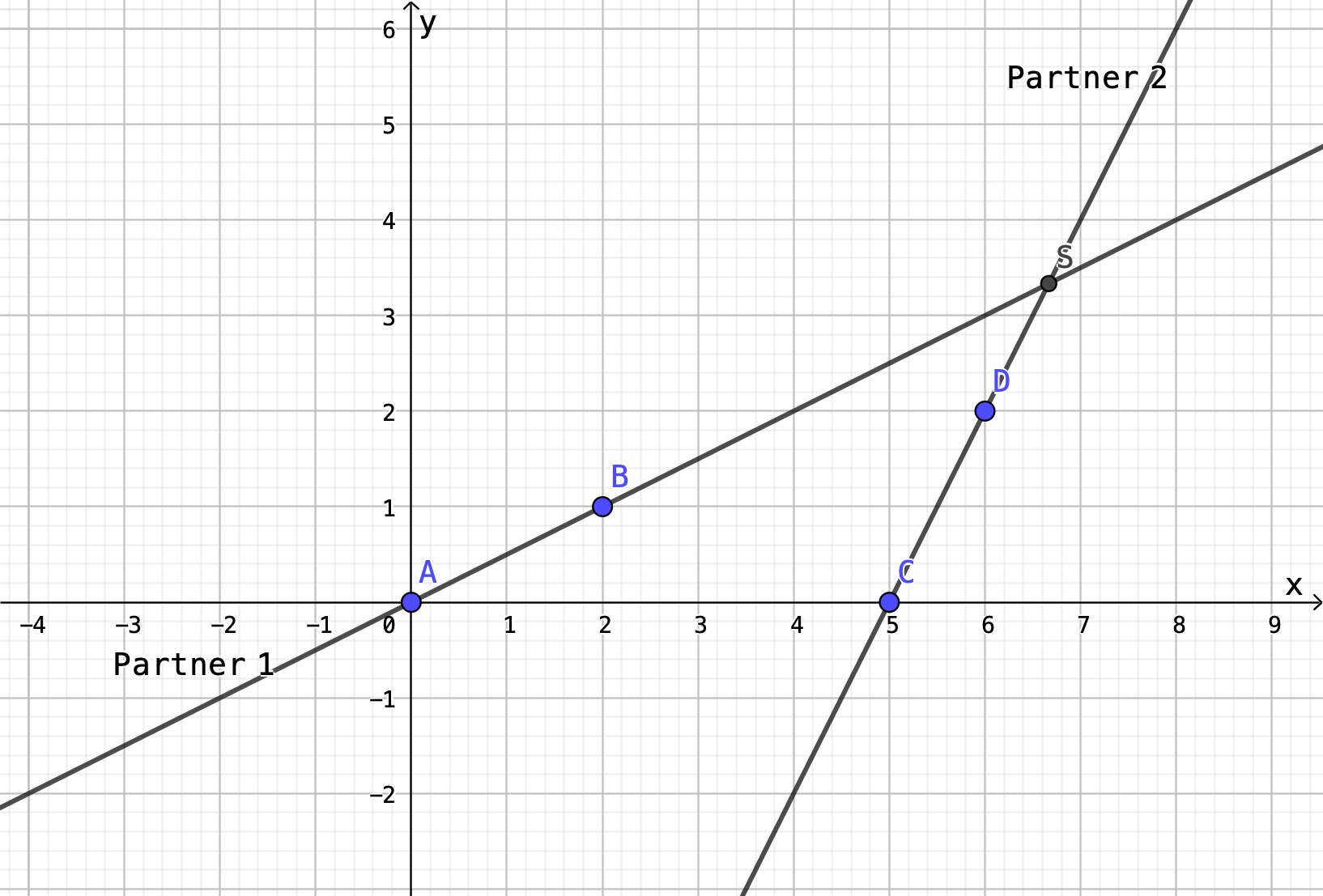
[](https://www.geogebra.org/m/gt4trkhm)

|  |  |
| --- | --- |
|  | 1. Folgen Sie den Anweisungen aus dem GeoGebra-Buch. 2. Notieren Sie sich hier die Anweisungen. |



Partner 1: y = 0,5 x

Partner 2: y = 2x - 10

**Schnittpunkte von zwei Geraden**

werden berechnet, indem man beide Geradengleichungen gleichsetzt. Es gilt also die Gleichung

**y = y**

aufzustellen und nach x aufzulösen.

1. Berechnung des Schnittpunkts von Partner 1 und Partner 2:

y = y

0,5x = 2x – 10 |-2x

-1,5x = -10 |: (-1,5)

x =

y = 0,5 =

S(|)

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1. Notieren Sie:

Vorgehen zur Berechnung von Schnittpunkten

(1) Geradengleichungen gleichsetzen

(2) nach x auflösen

(3) x-Wert in eine Geradengleichung einsetzen

(4) den zugehörigen y-Wert bestimmen

(5) Schnittpunkt notieren

Übungsphase 1

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|  |  |  |  |  |  |  | Individuelle Lösung, je nach Aufgabenstellung.  Lösung jeweils in GeoGebra sichtbar. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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Übungsphase 2

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| g: y= 0,5(x + 2)  h: y= 0,5x +2  y = y  0,5x + 1 = 0,5x + 2 |- 0,5x  1 = 2 falsche Aussage  g und h sind parallel, da sie keine Schnittpunkte haben.  g: y= 0,5(x + 4)  h: y= 0,5x +2  y = y  0,5x + 2 = 0,5x + 2 |- 0,5x  2 = 2 wahre Aussage  g und h sind identisch, da sie unendlich viele Schnittpunkte haben. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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Übungsphase 3

g: y = 0,4 x + 2

h: y = 0,6 x S(10|6)

g: y = 0,2 (x + 10)

h: y = 0,2x - 5 keine gemeinsame Punkte/parallel

g: y = -2(x + 2)

h: y = 0,5x + 1 S(-2|0)

g: y = -2 x - 9

h: y = 0,5x + 1 S(-4|-1)

g: y = -3(x – 9)

h: y = -3x + 27 unendlich viele gemeinsame Punkte/identisch

g: y = -3(x - 9)

h: y = 3(x + 1) S(4|15)

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Lösungsbuchstabe:

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