



Bundes-
Blindeninstitut
Wien

LeMa
Lehr- und Lernmaterialien

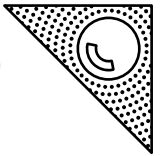
Vergrößerte und aufbereitete Versionen
ausgewählter Grafiken aus dem Schulbuch

Angewandte Mathematik HAK 1



Grafiken: Tomáš Batha

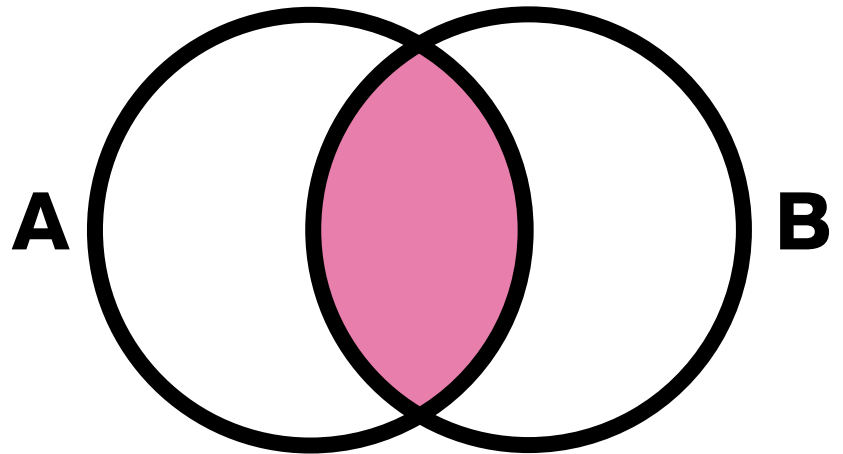
LEMA - Lehr- und Lernmaterialien
Hergestellt von der Abteilung für Inklusion und Lehrmittel am Bundes-Blindeninstitut Wien,
Wittelsbachstraße 5, 1020 Wien, Tel.: 01/728 08 66-405, 406, lmz@bbi.at, www.bbi.at



Verknüpfung von Mengen

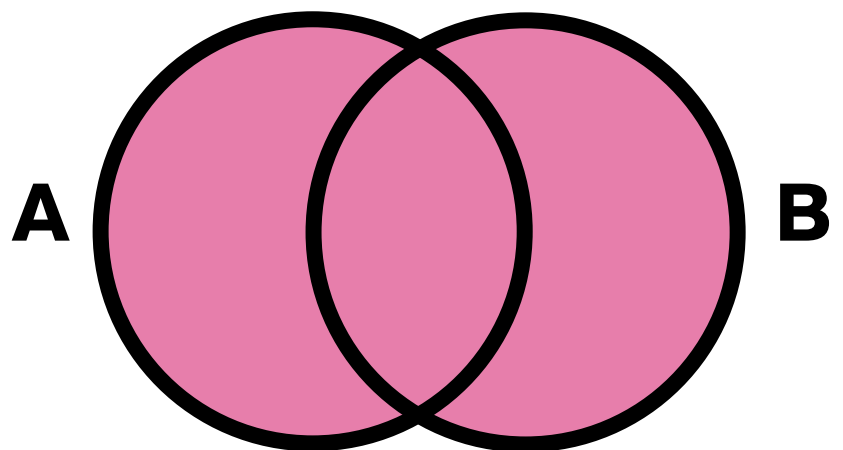
**Durchschnitts-
menge**

$A \cap B$



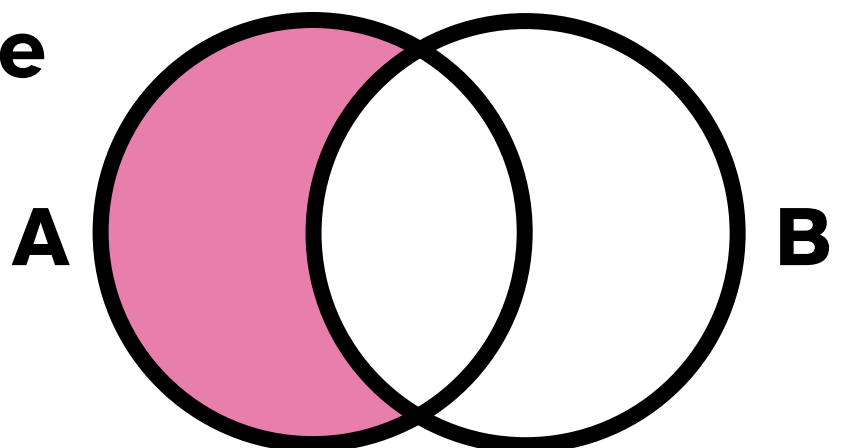
**Vereinigungs-
menge**

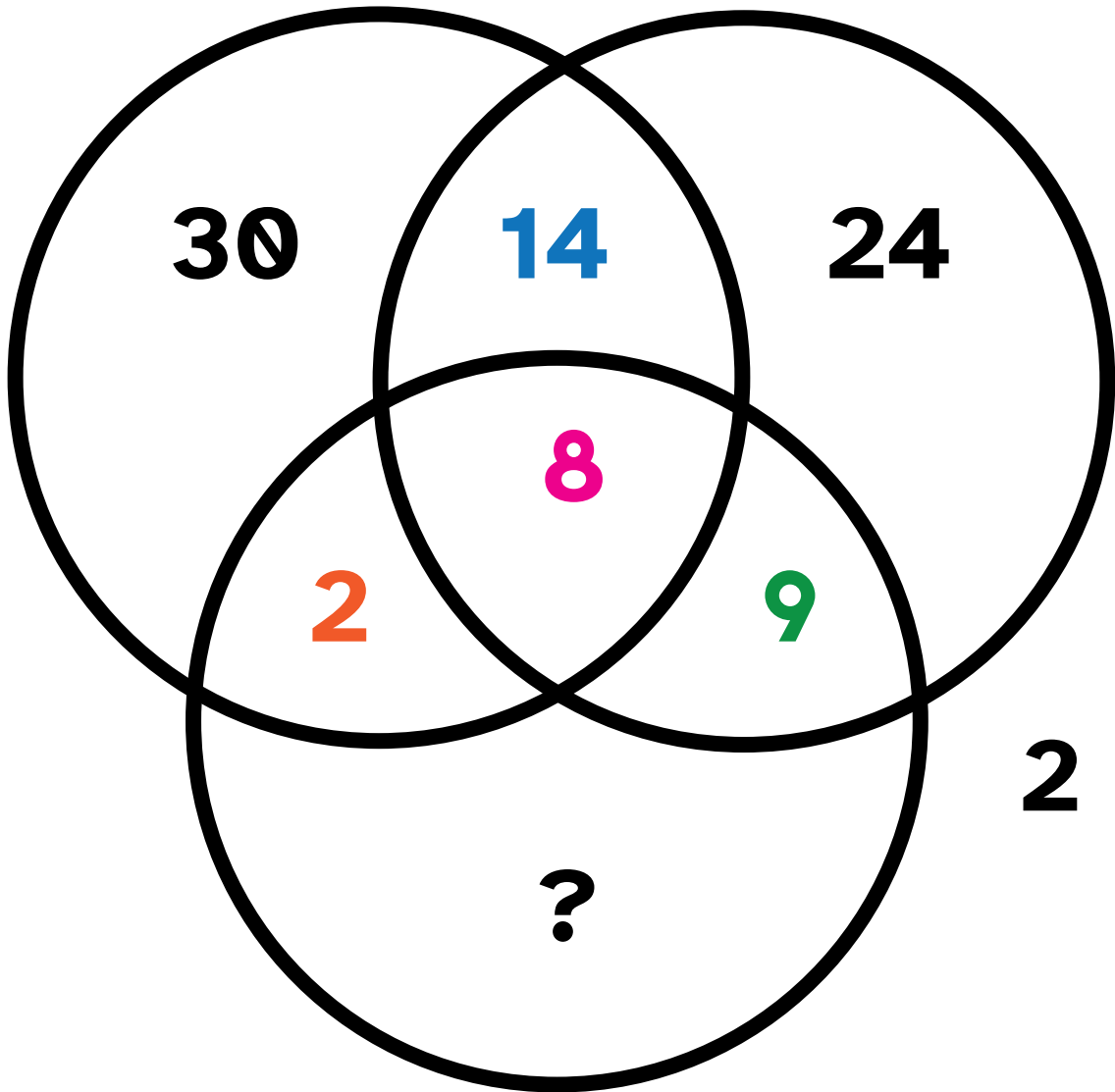
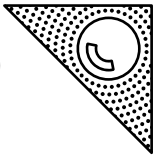
$A \cup B$

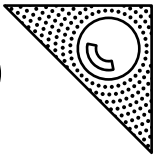


Differenzmenge

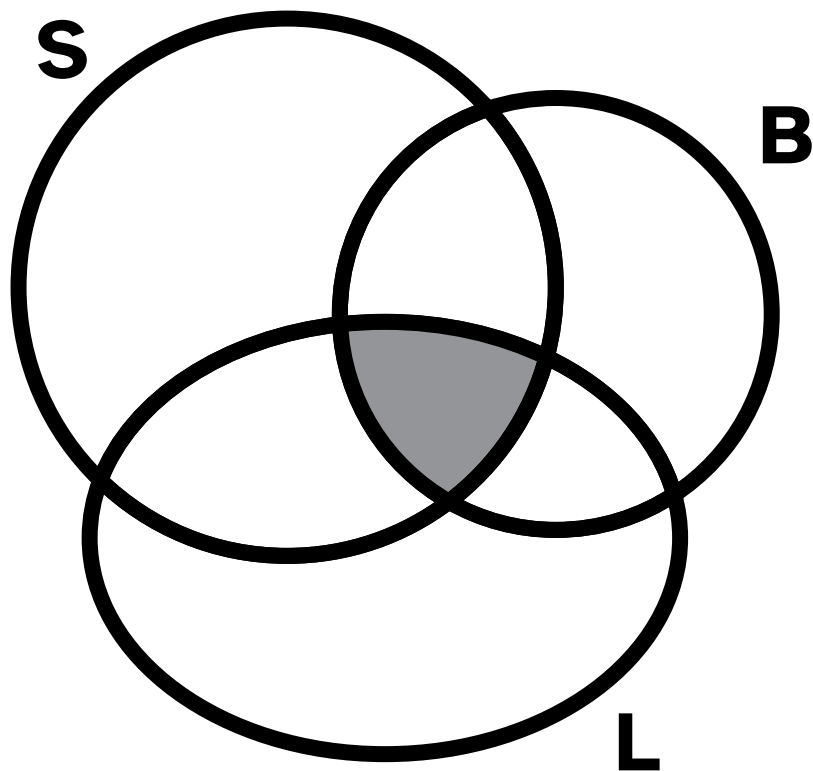
$A \setminus B$



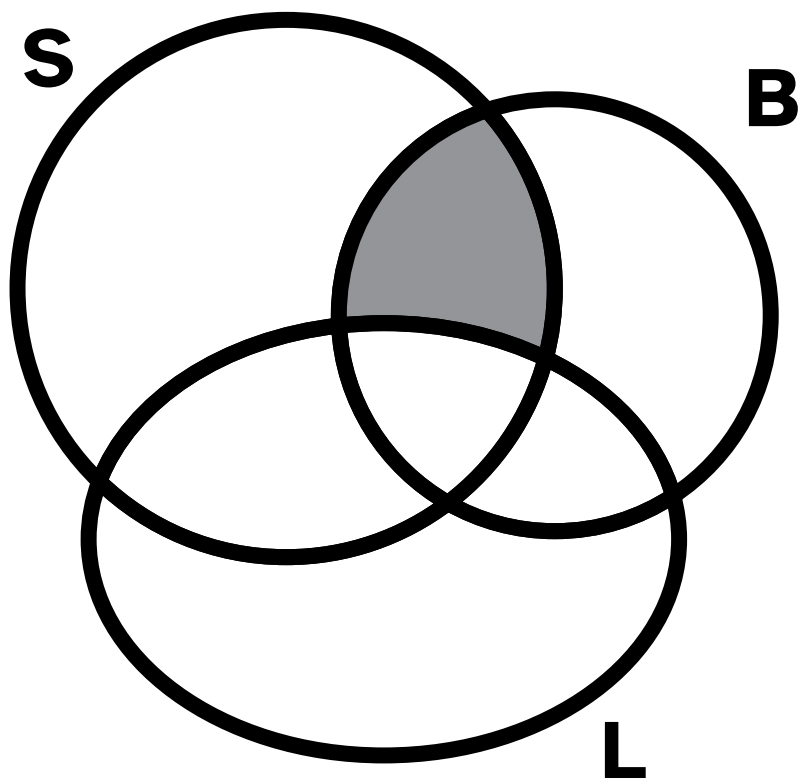


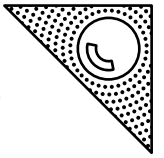


a)

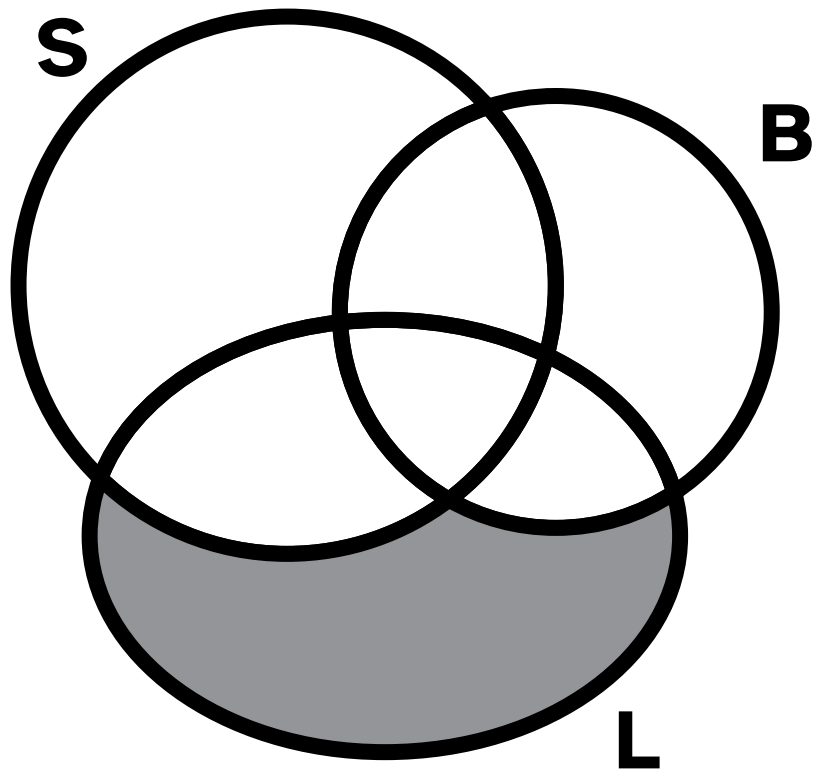


b)

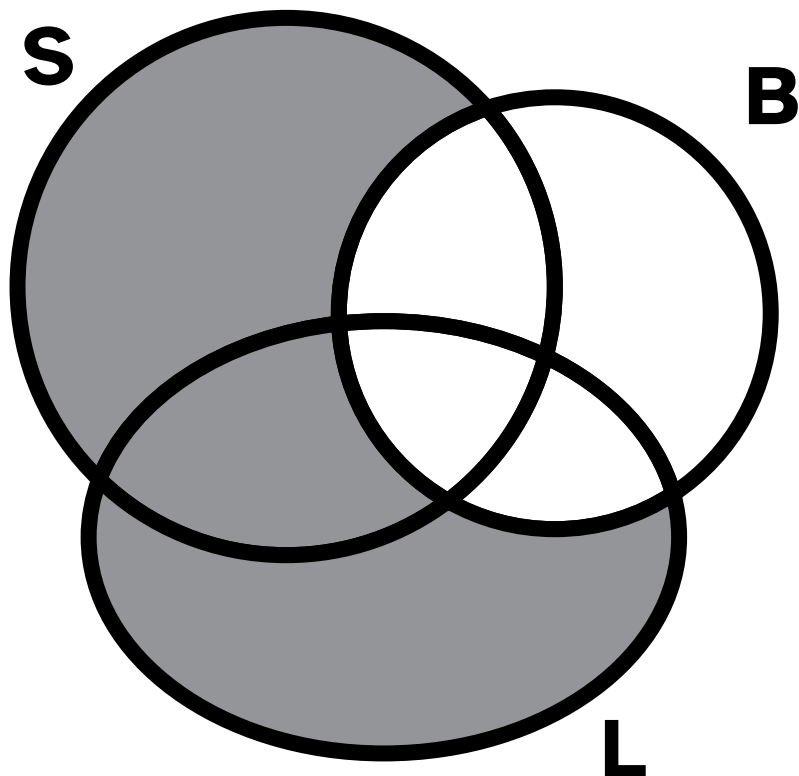


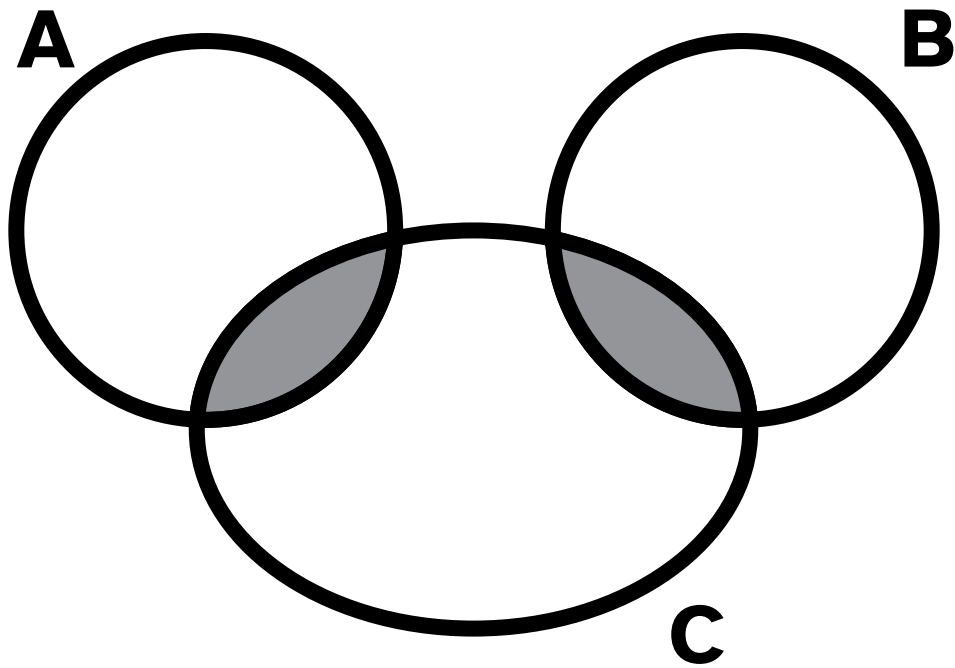
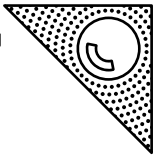


c)

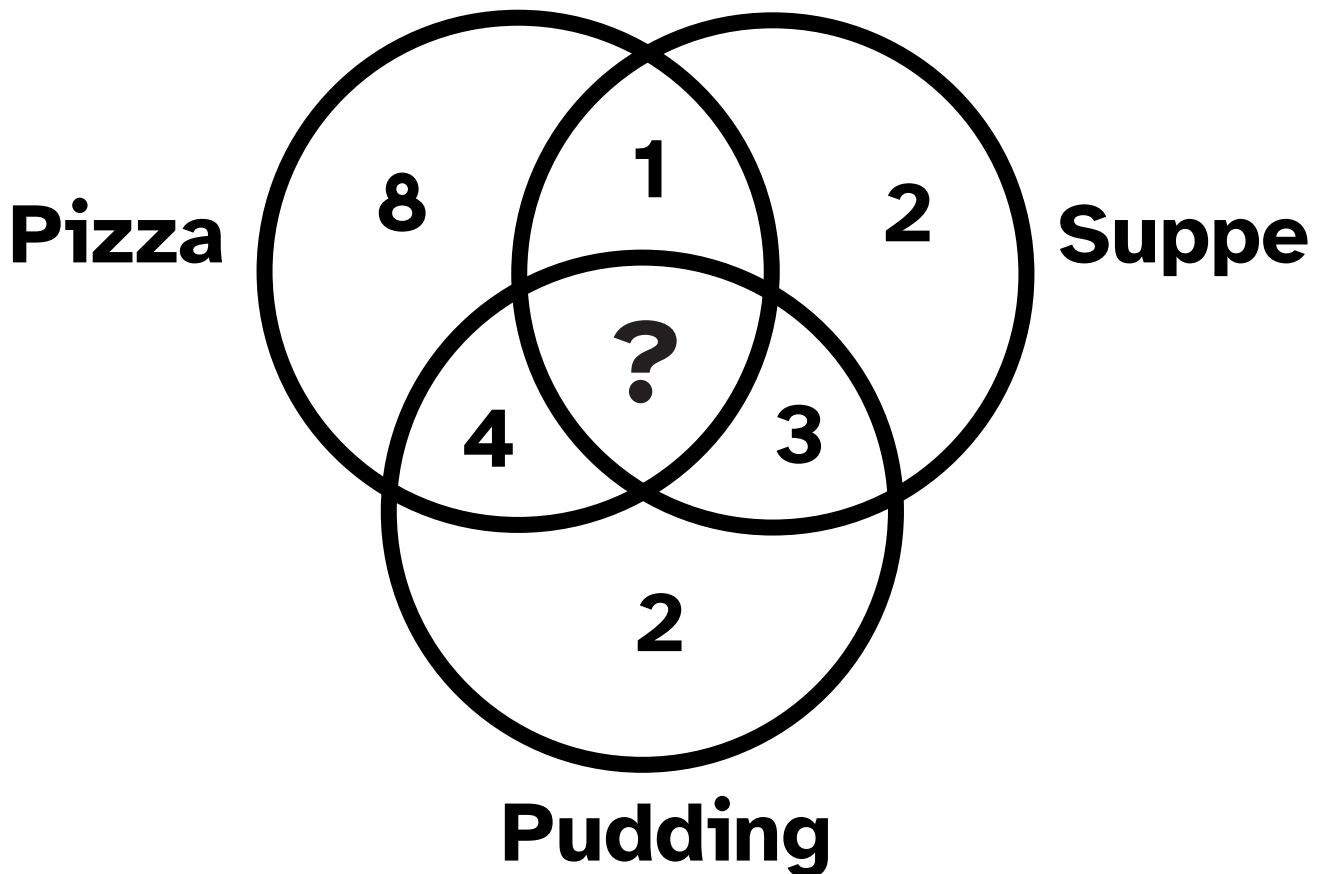


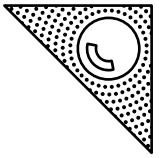
d)





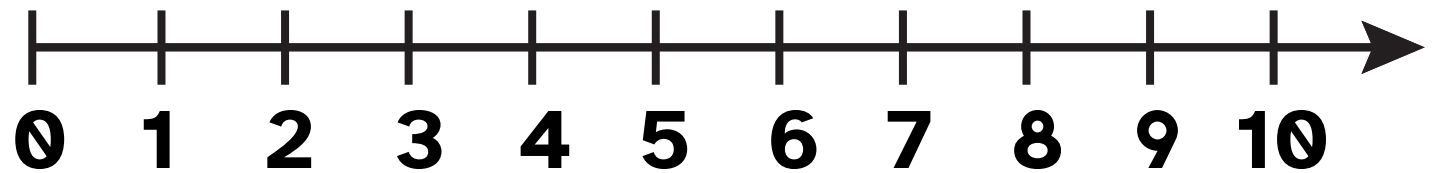
1.17





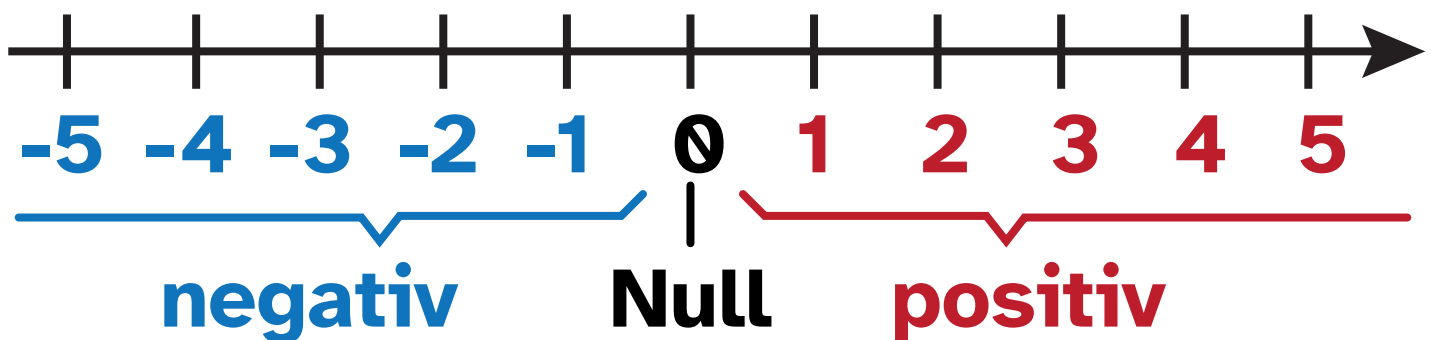
Die natürlichen Zahlen 'N

Definition



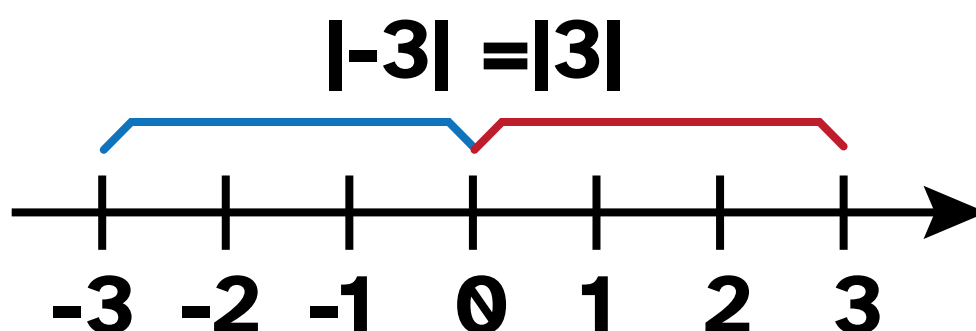
Die ganzen Zahlen 'Z

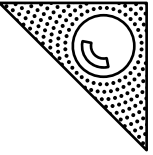
Definition



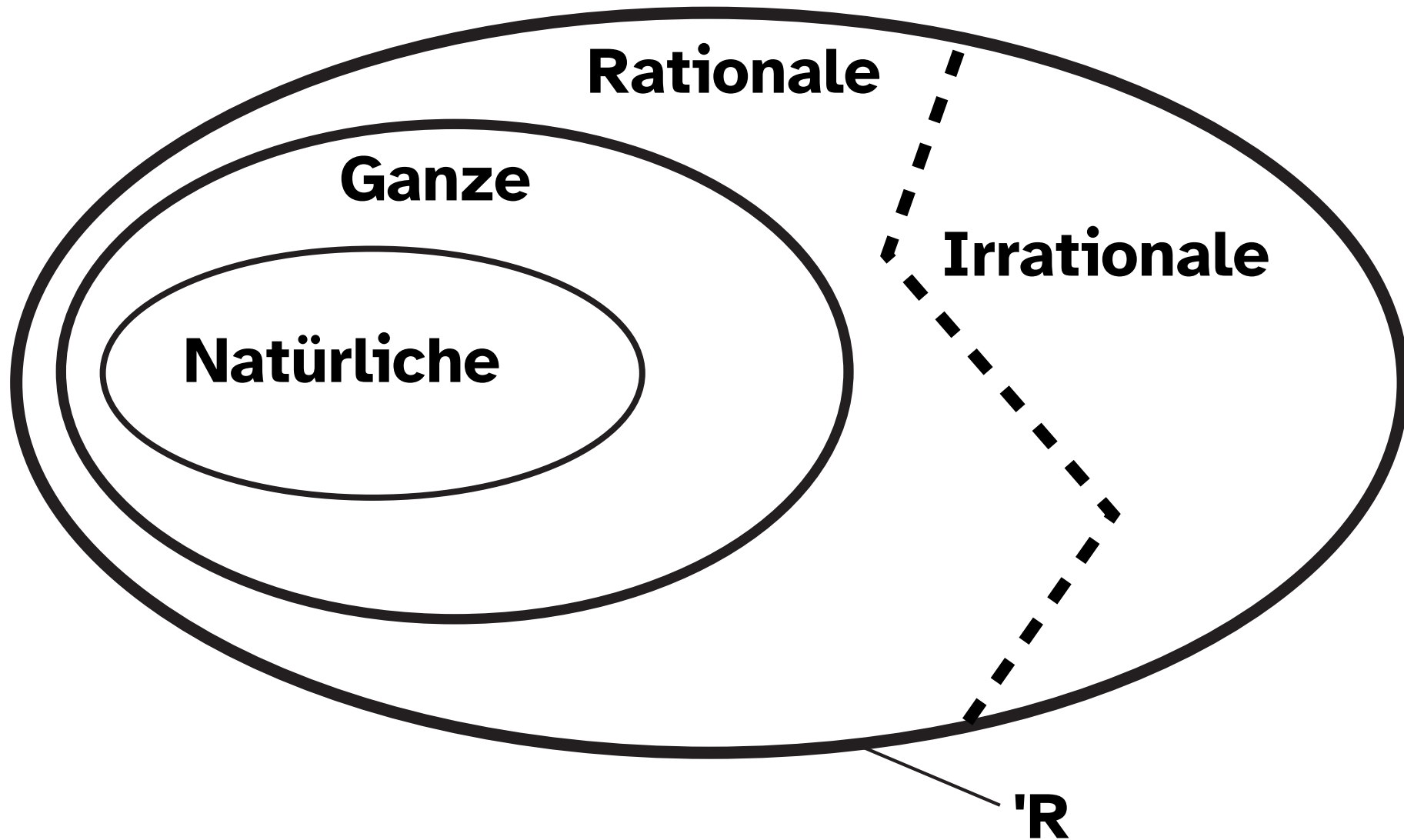
Betrag einer Zahl

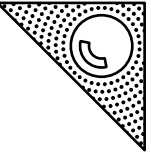
Definition



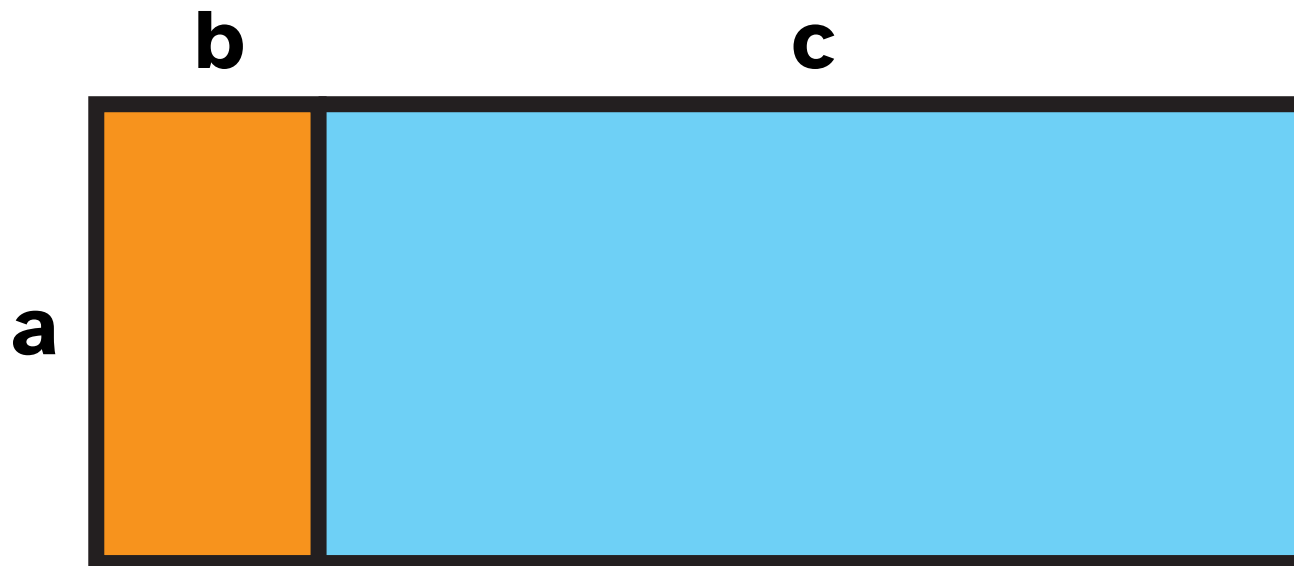


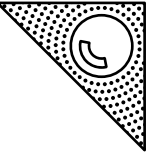
Die reellen Zahlen



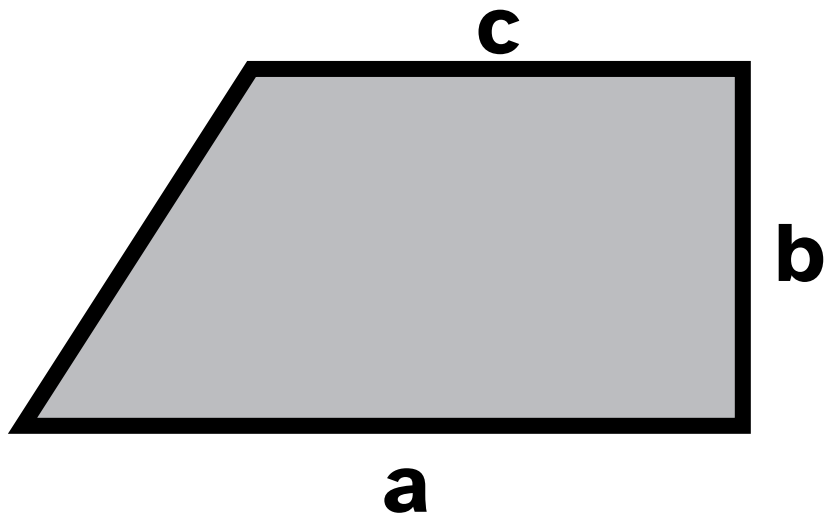


Erklären Sie, wie man mit Hilfe der folgenden Grafik das Distributivgesetz begründen kann.

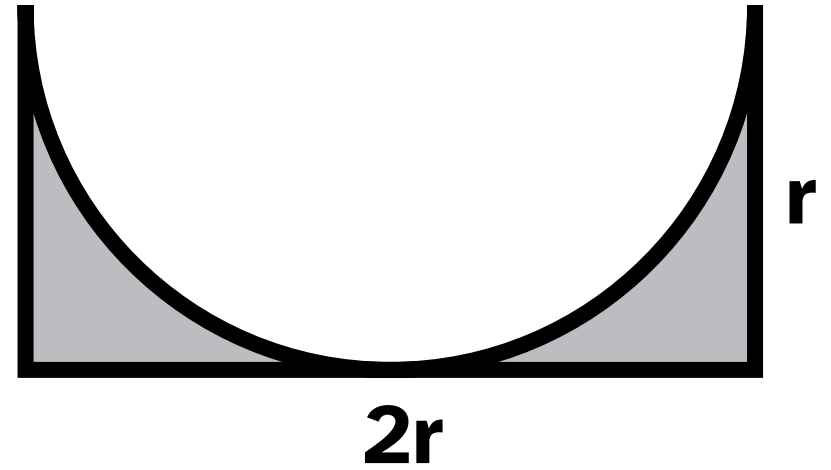




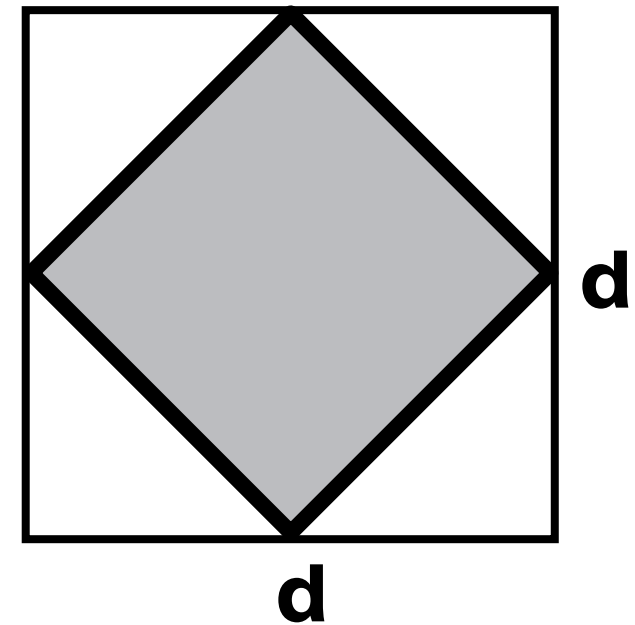
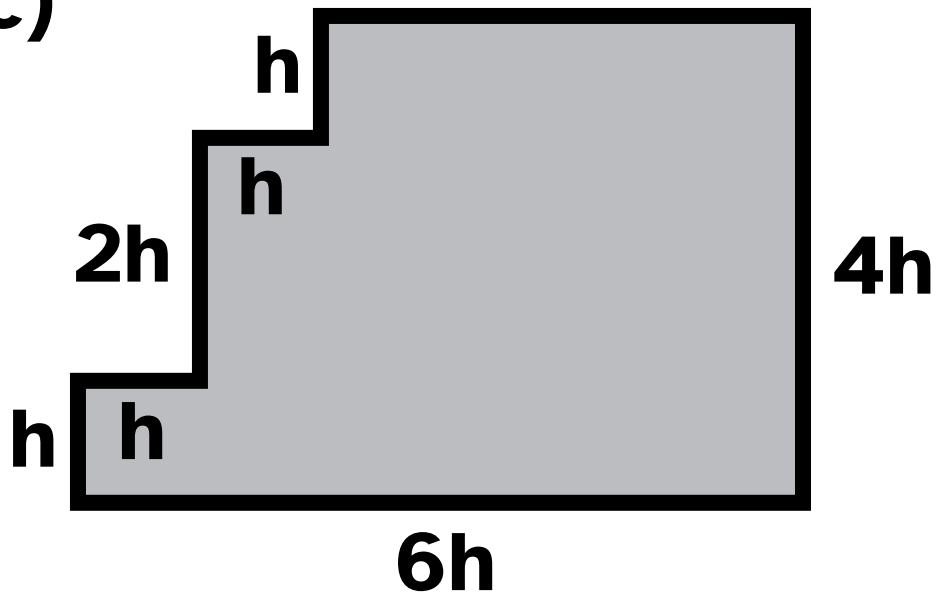
a)

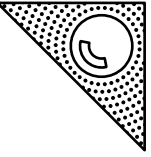


b)



c)



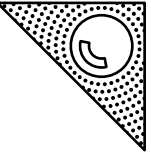


**Treff-
punkt**

Weg von Judith

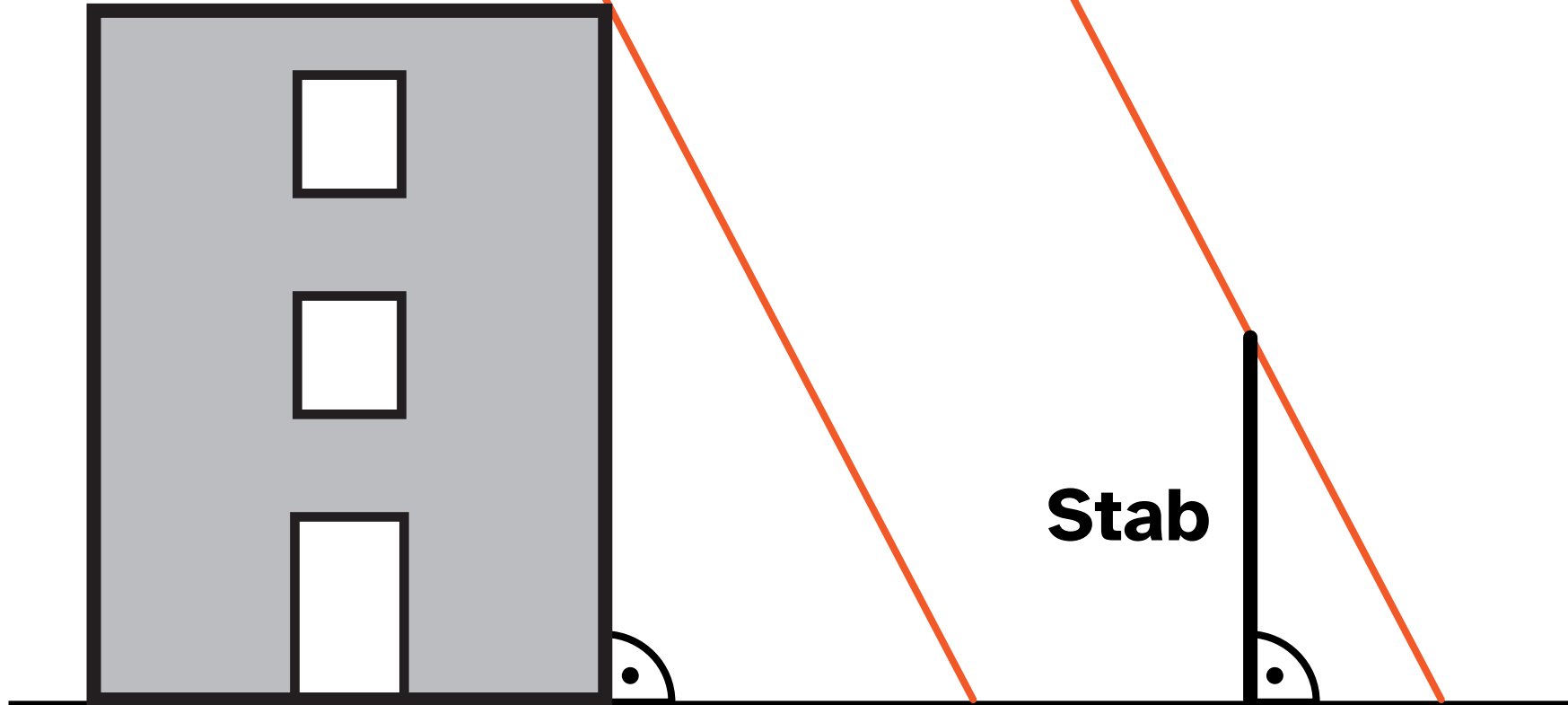
Weg von Eva

gesamte Wegstrecke= 34 km



Sonnen-
strahlen

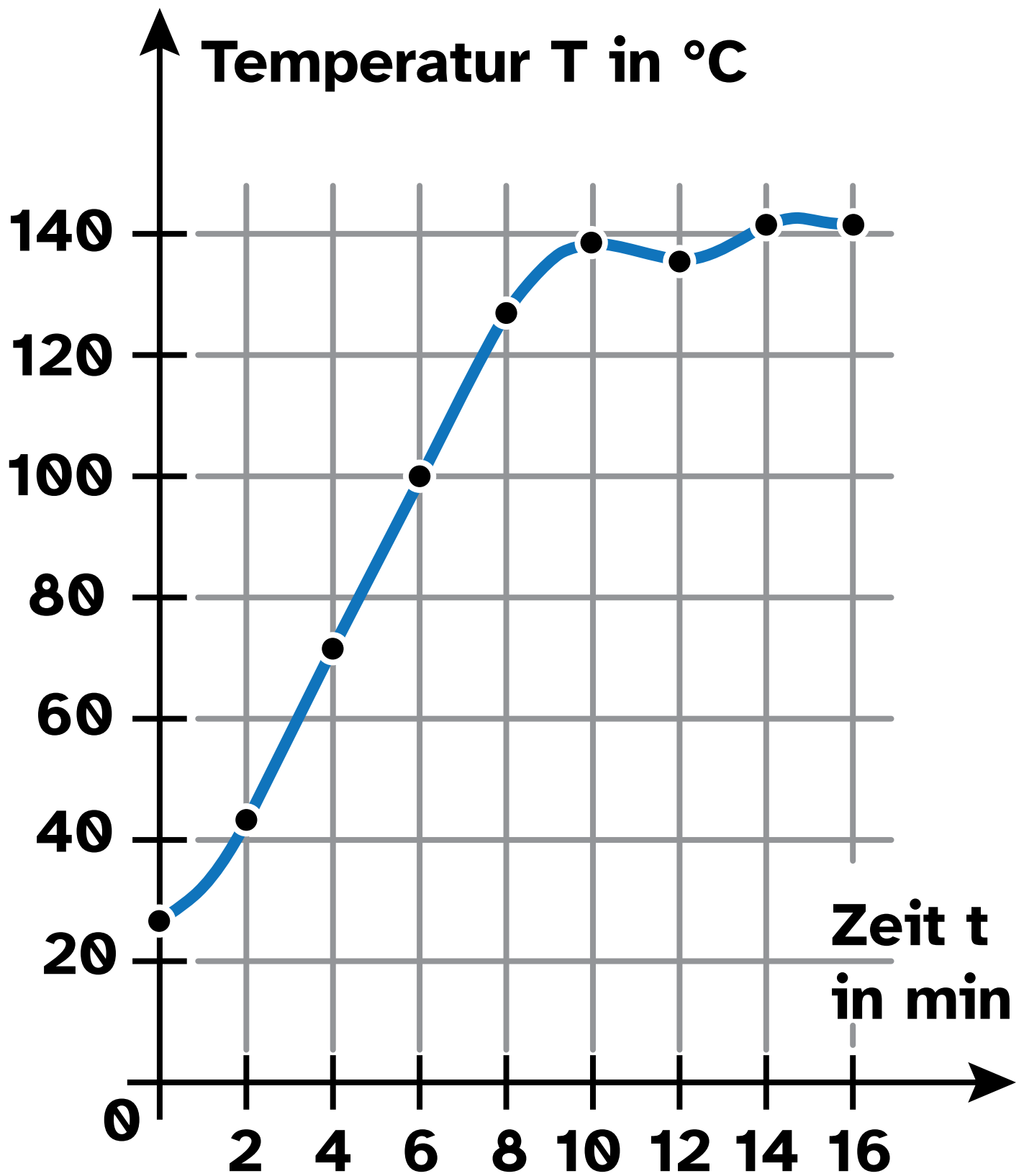
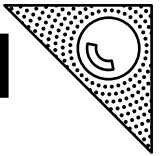
Haus

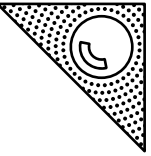


Schatten

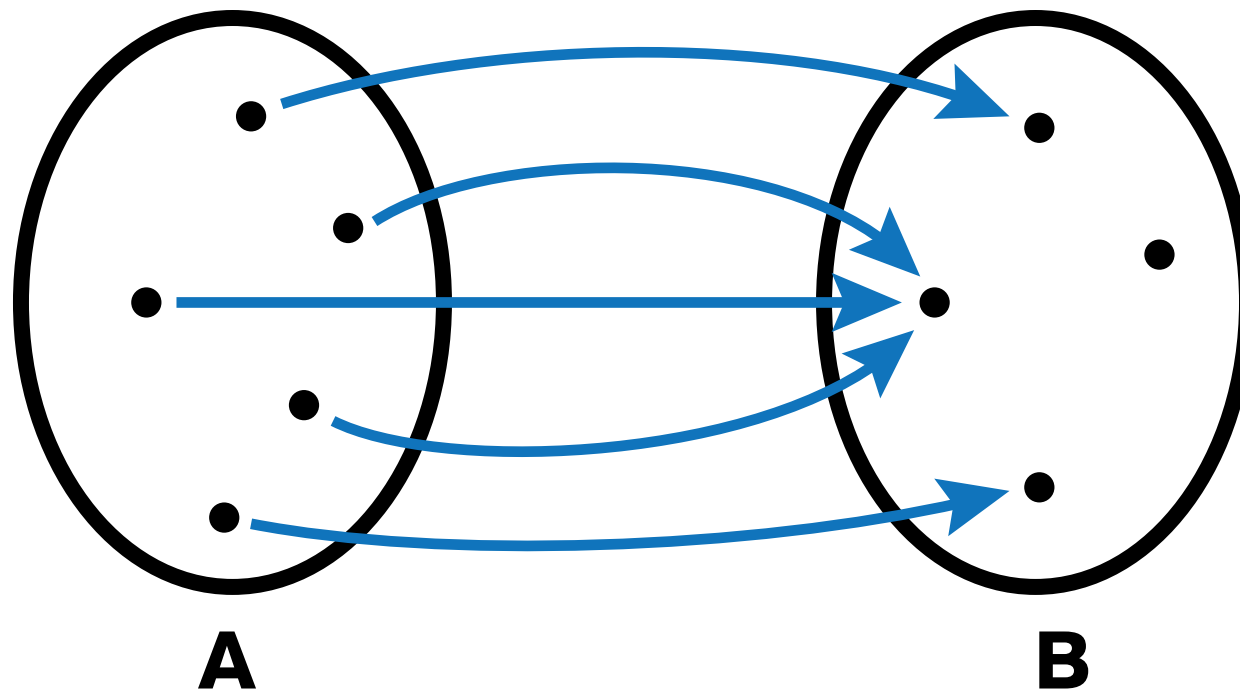
Schatten

Boden

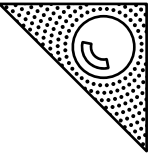




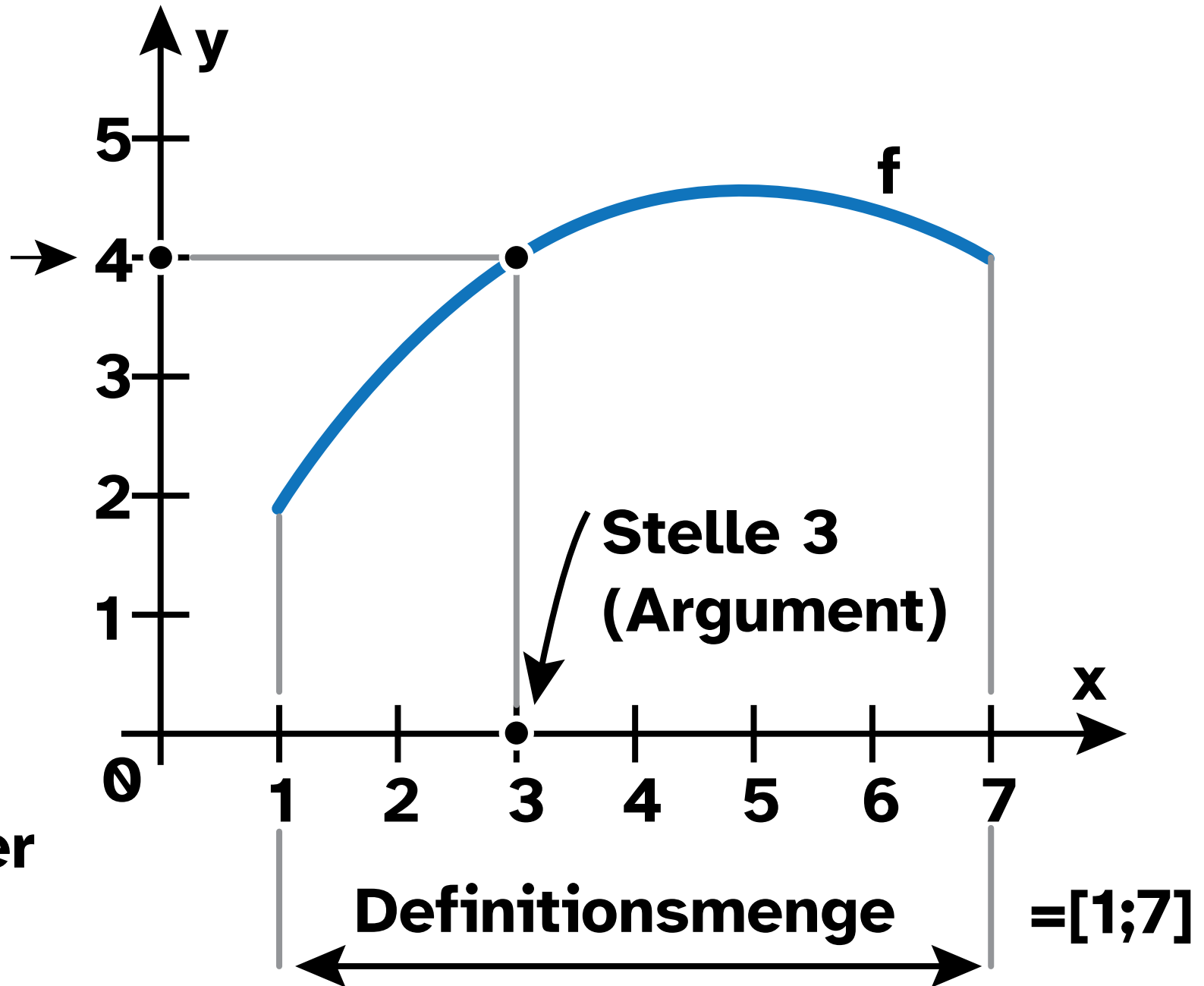
Eine Funktion ist eine eindeutige Zuordnung. Jedem Element x einer Menge A (Definitionsmenge) wird dabei ein Element einer Menge B (Zielmenge) zugeordnet.



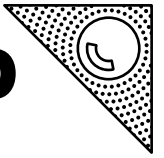
AngMathHAK1 S.98 Funktion: Bezeichnungen



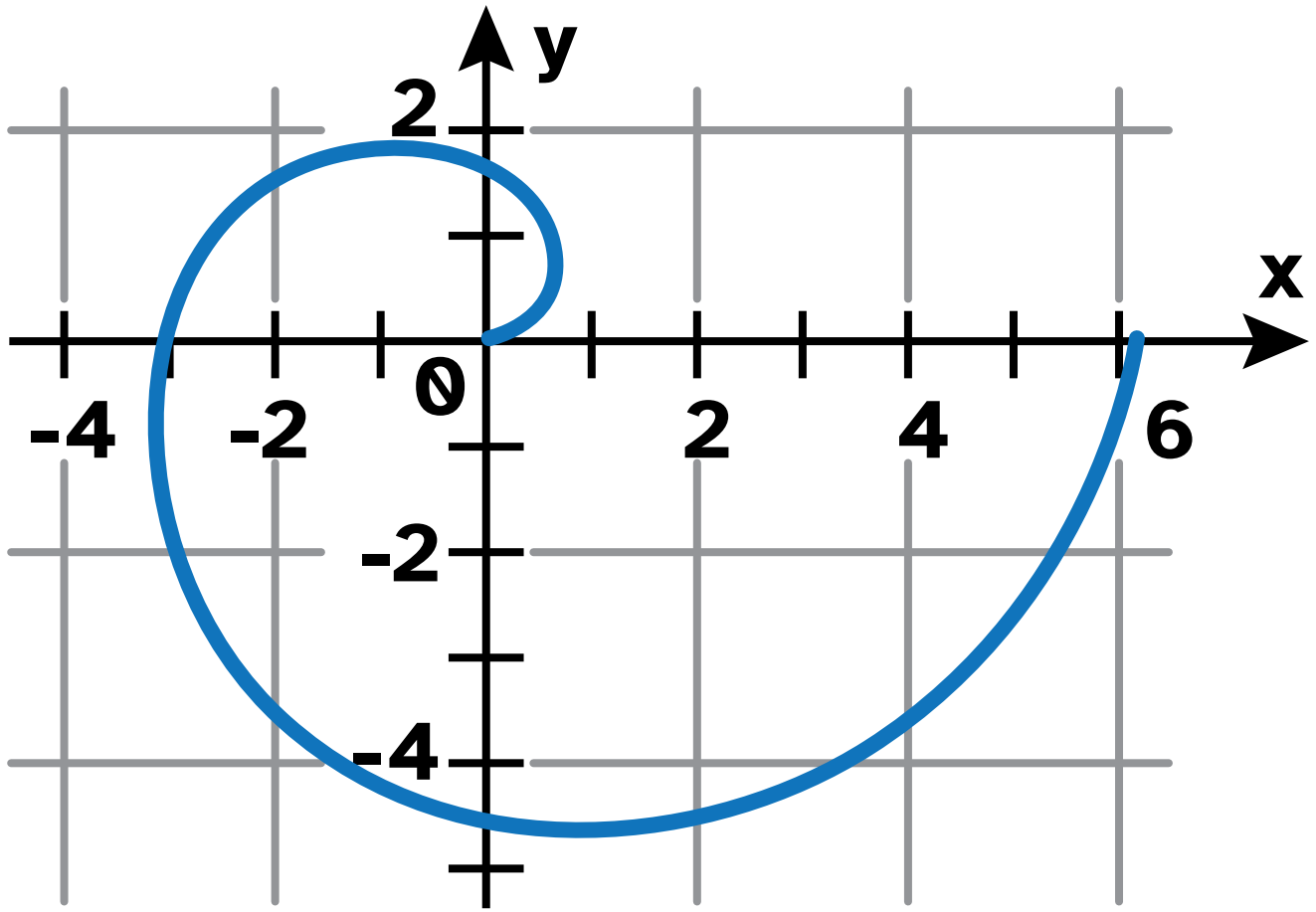
Funktionswert an der Stelle 3, $f(3) = 4$



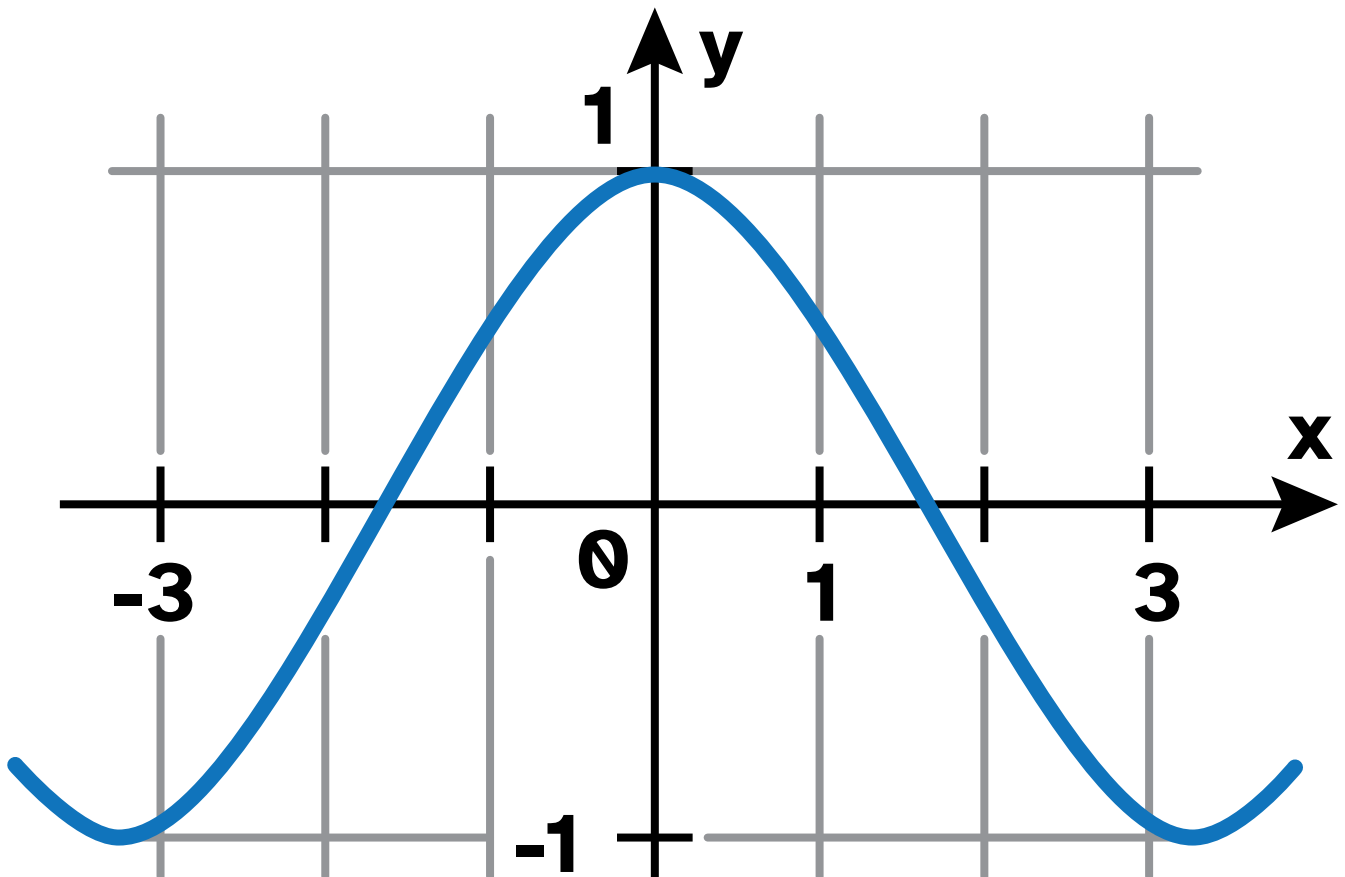
f... Name der Funktion

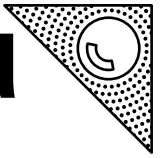


a)

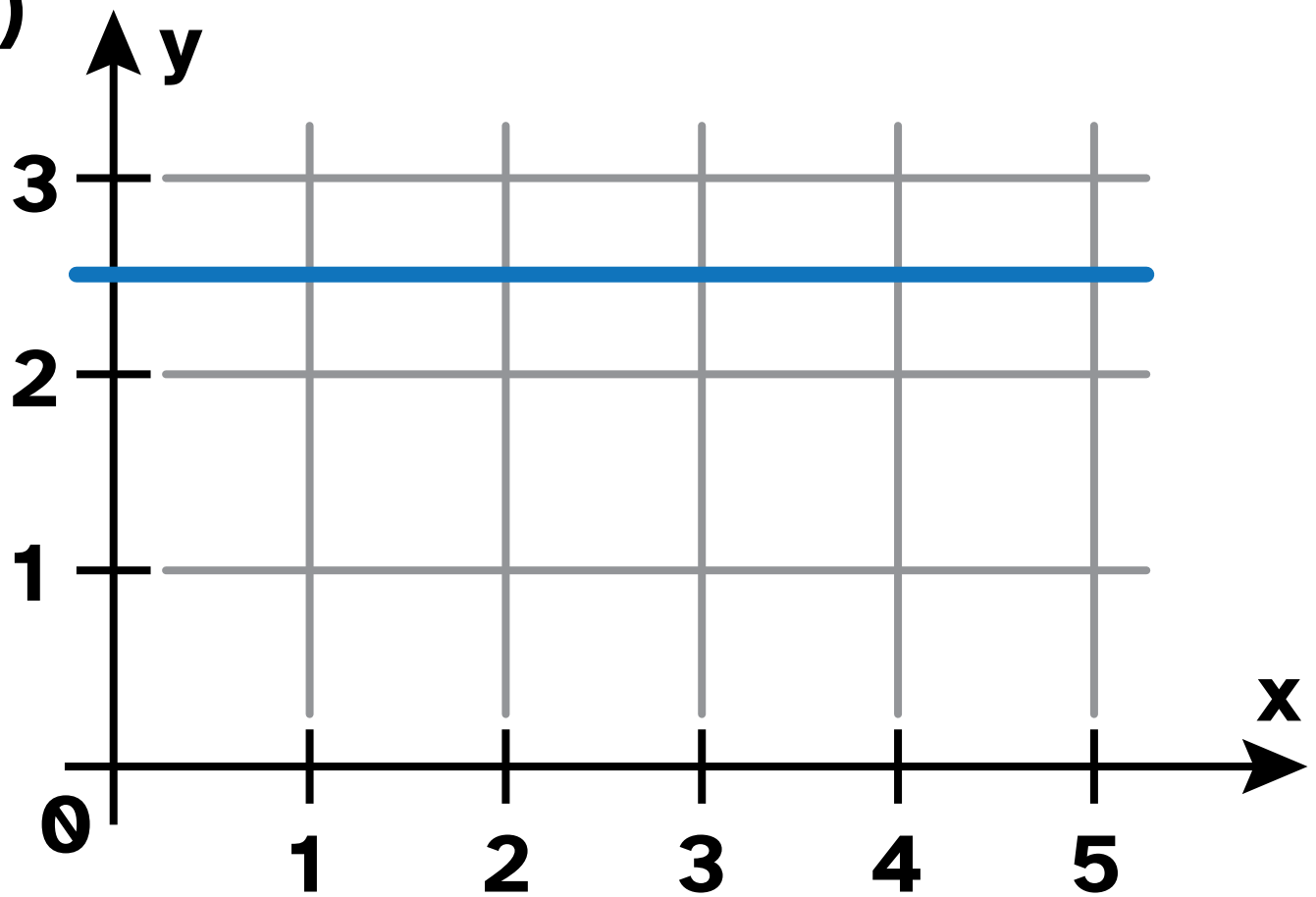


b)

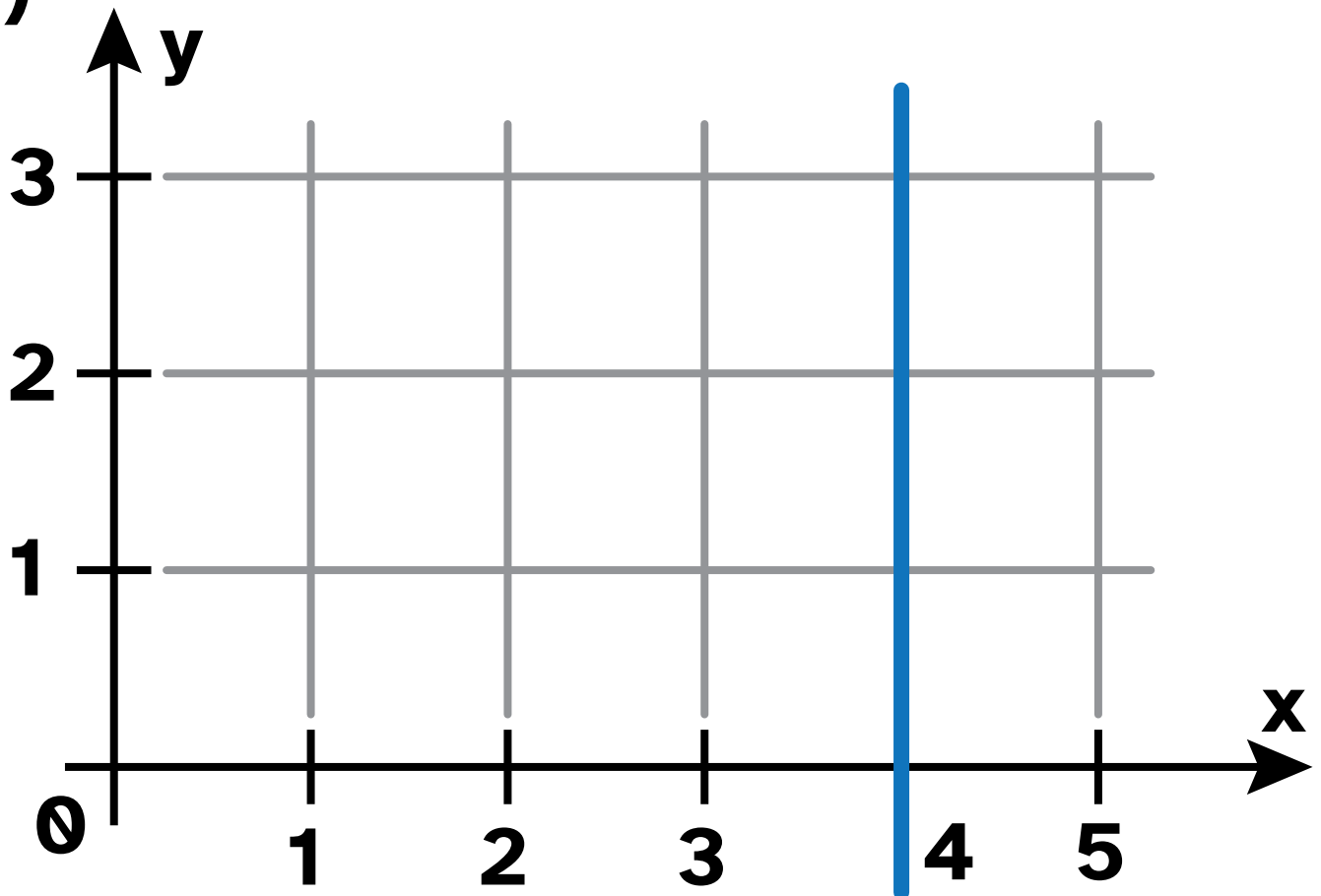


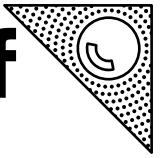


c)

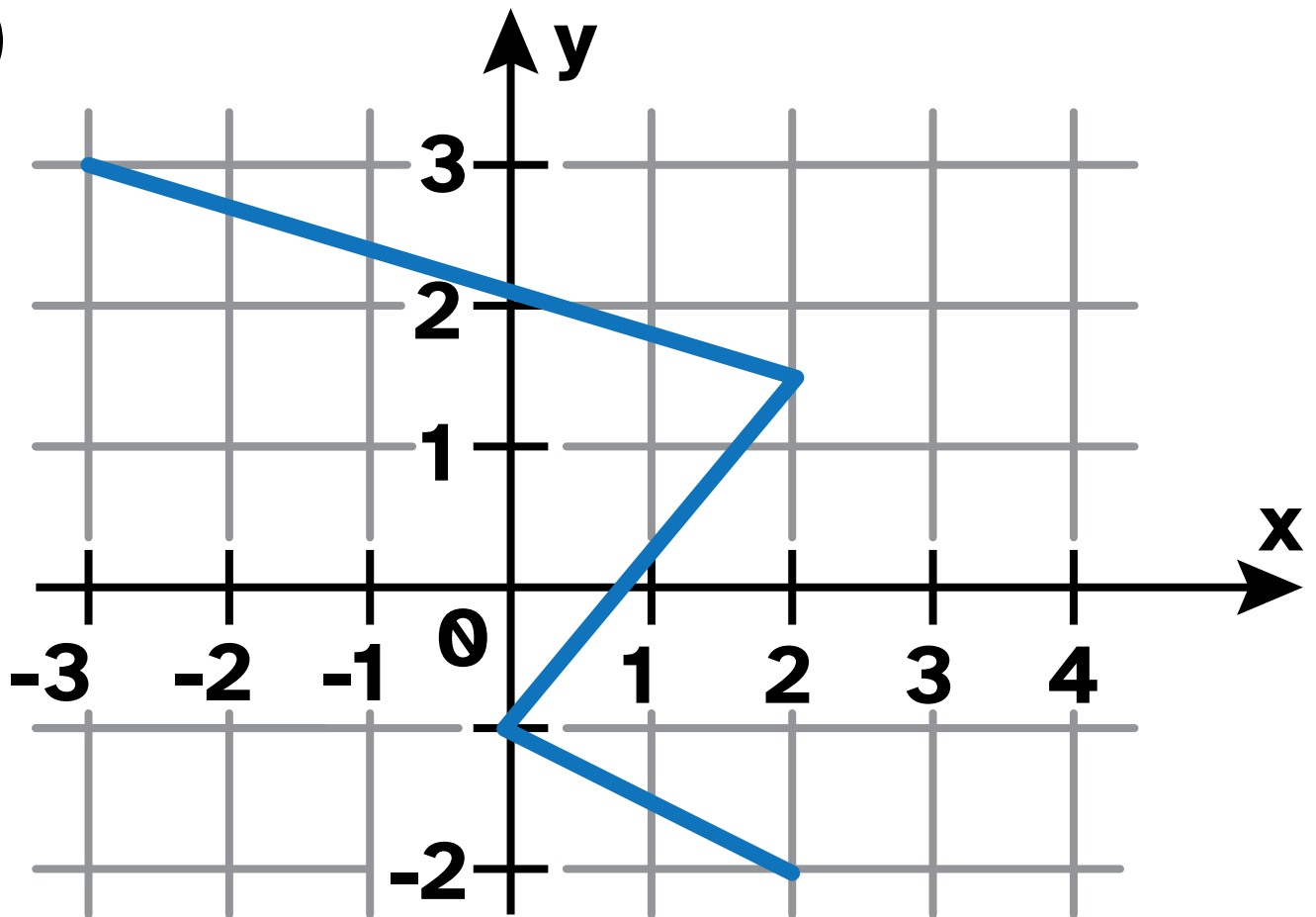


d)

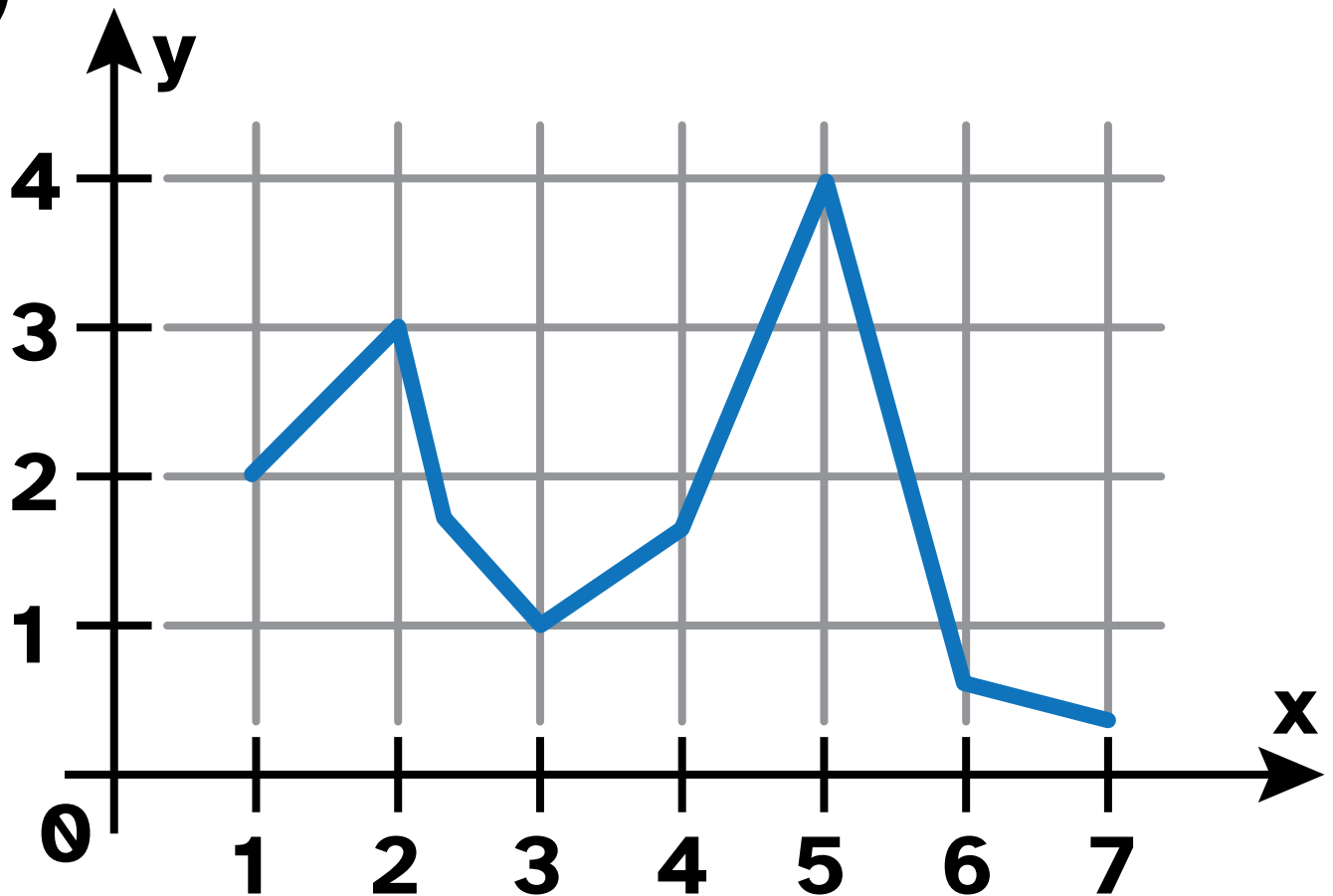


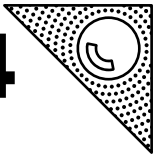


e)

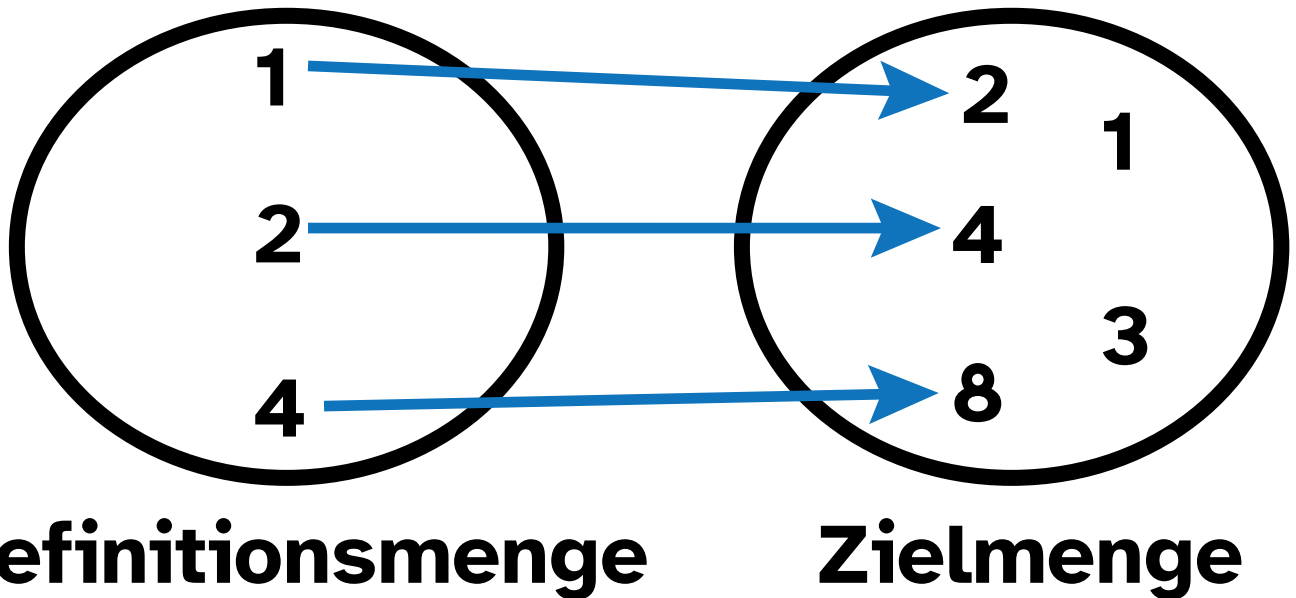


f)

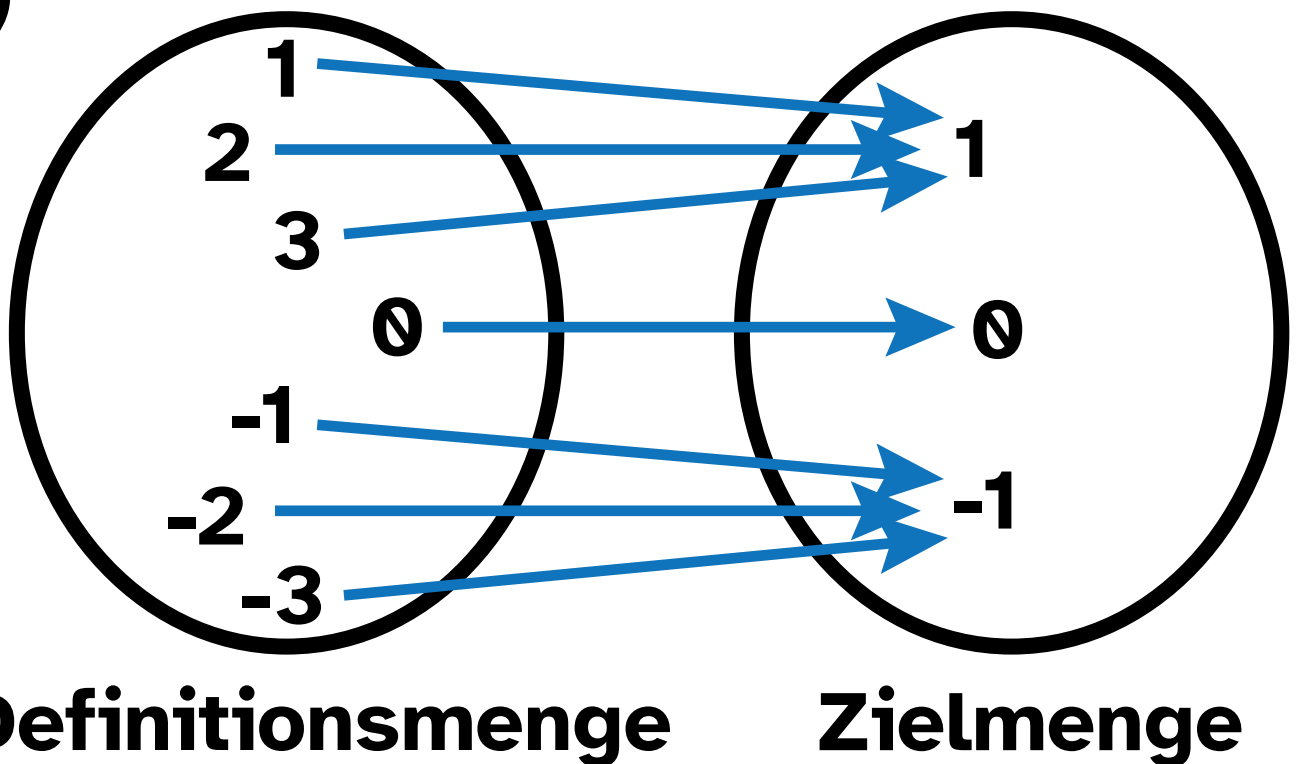


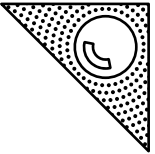


a)

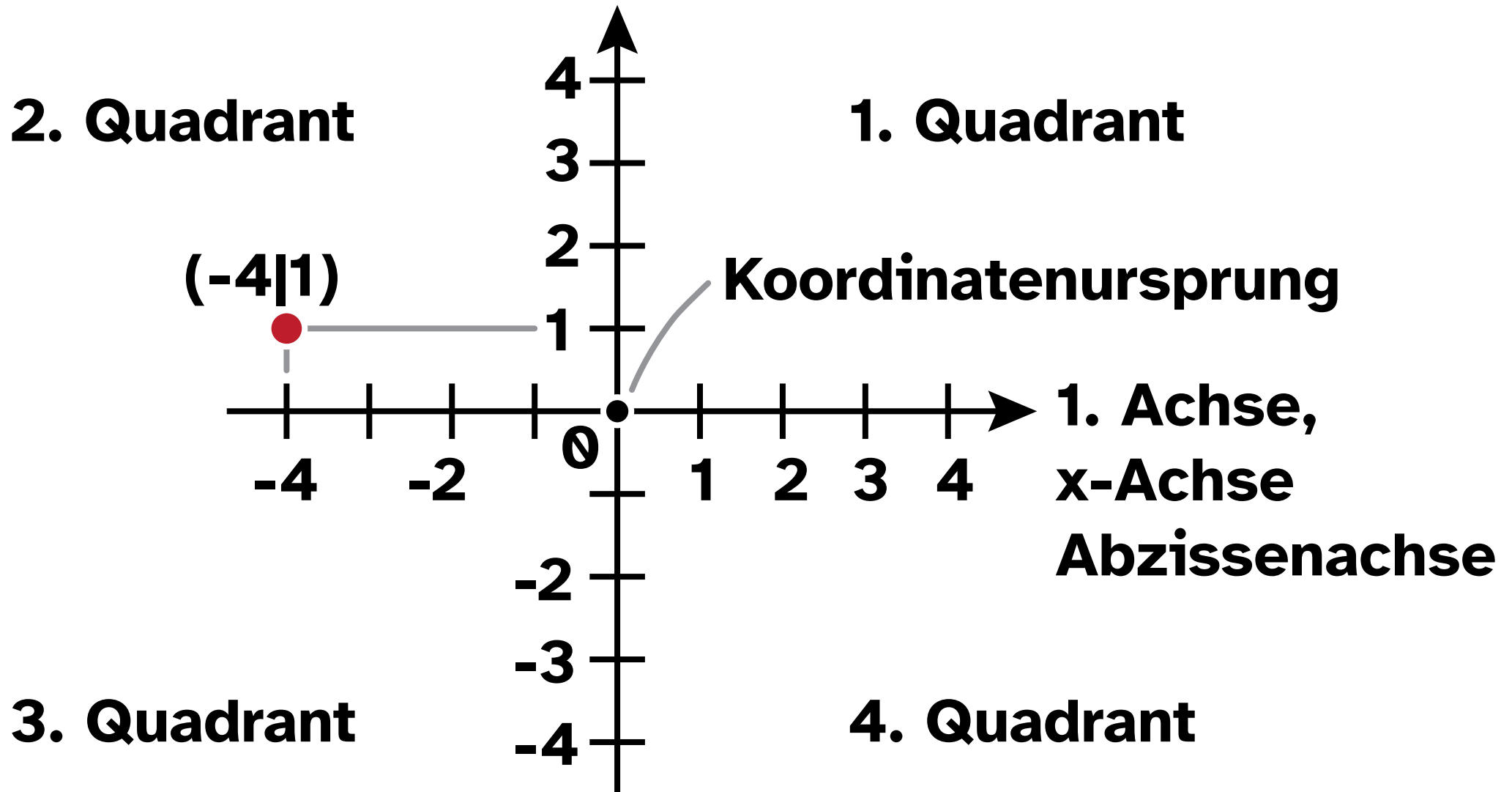


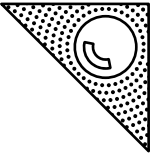
b)



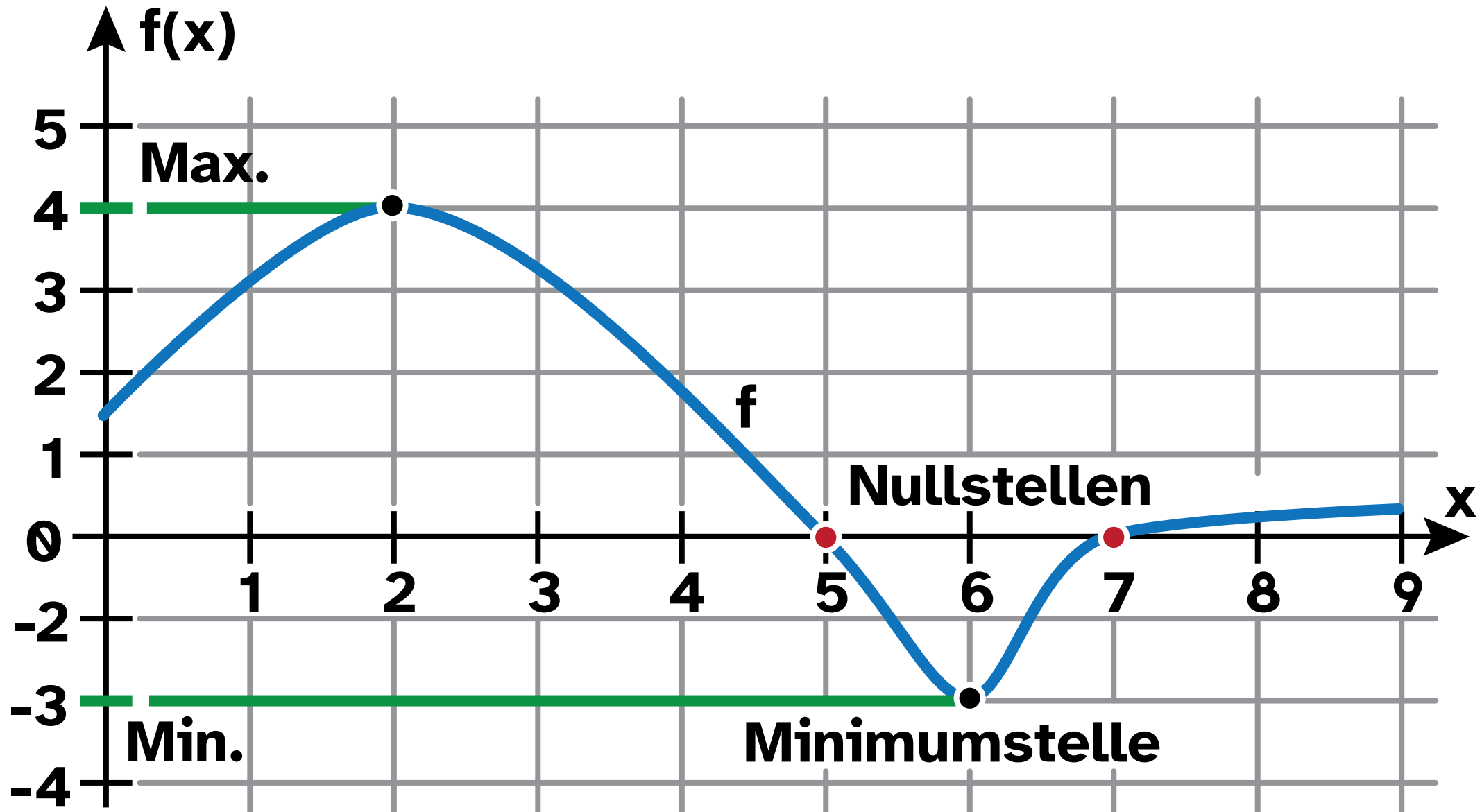


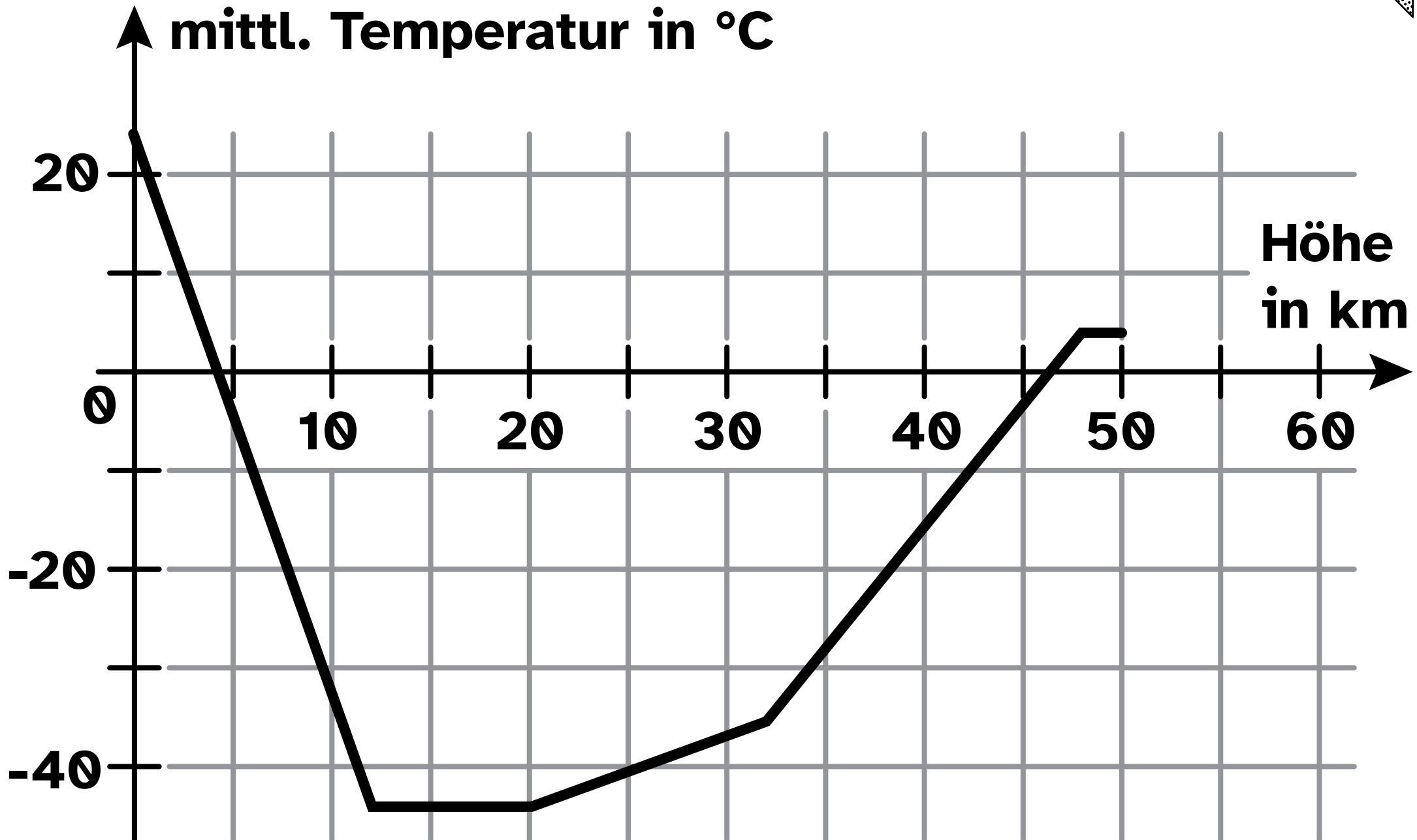
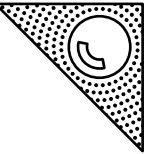
2. Achse, y-Achse oder Ordinatenachse

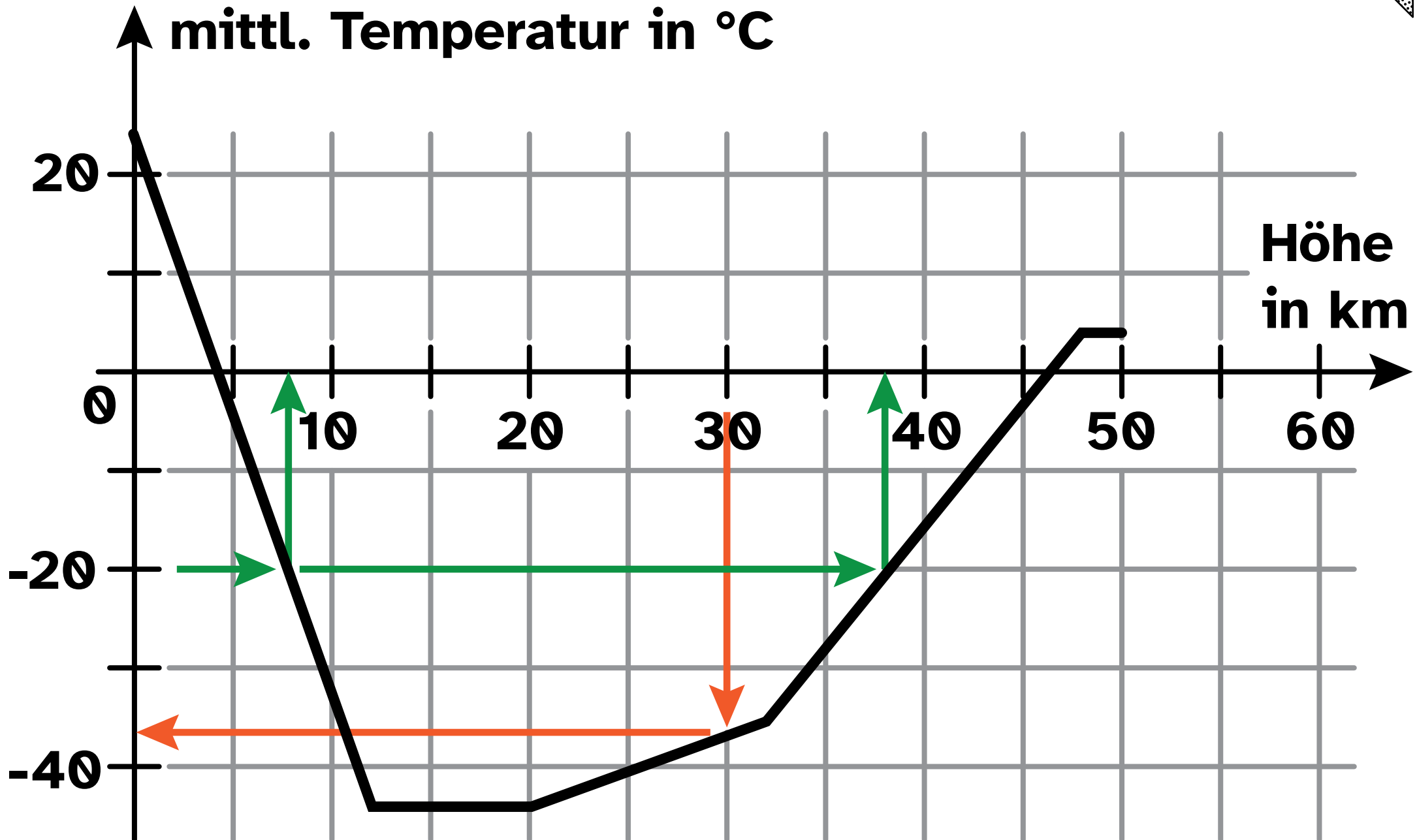
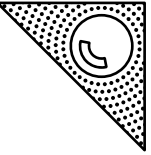


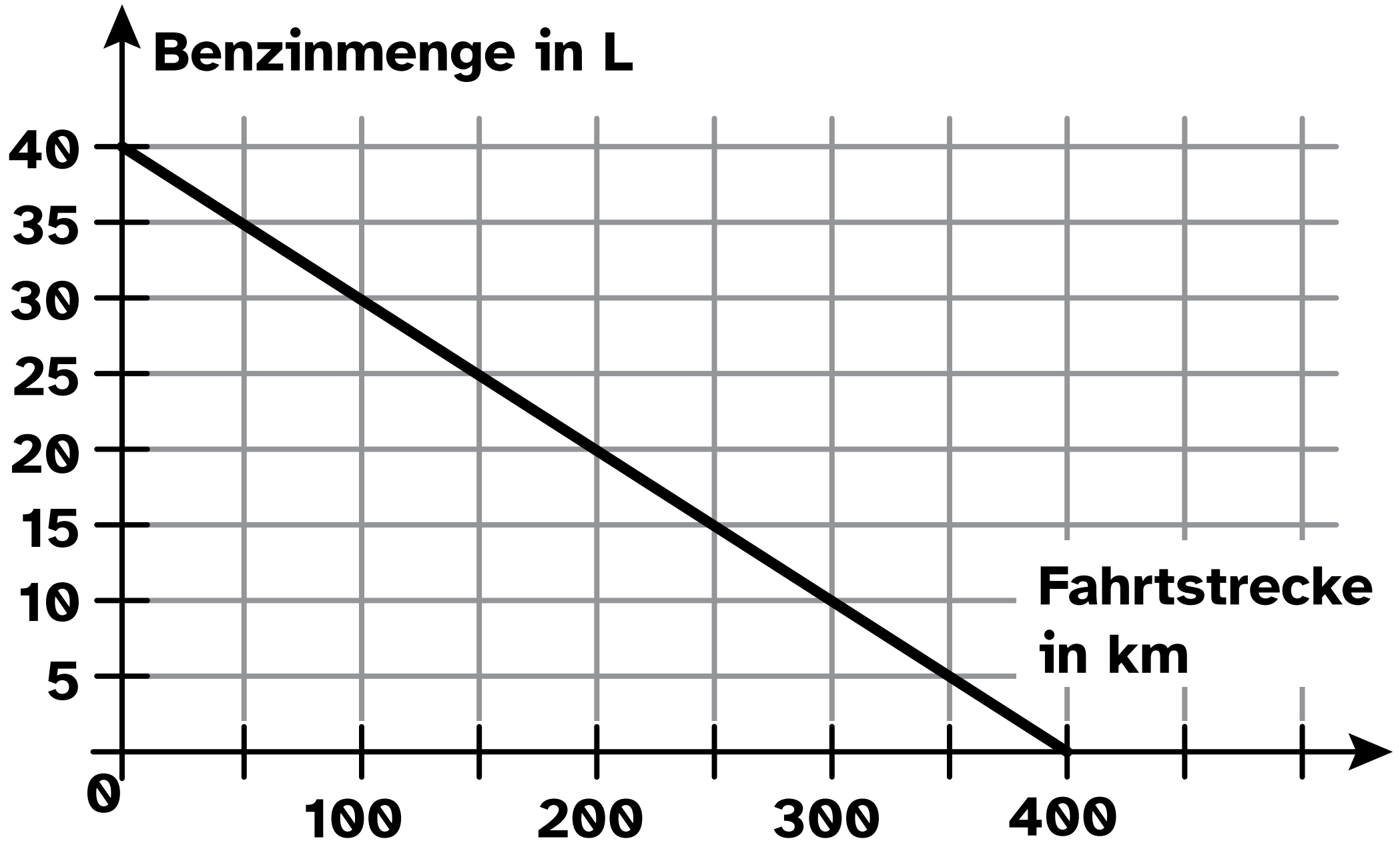
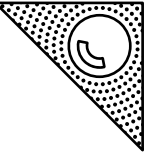


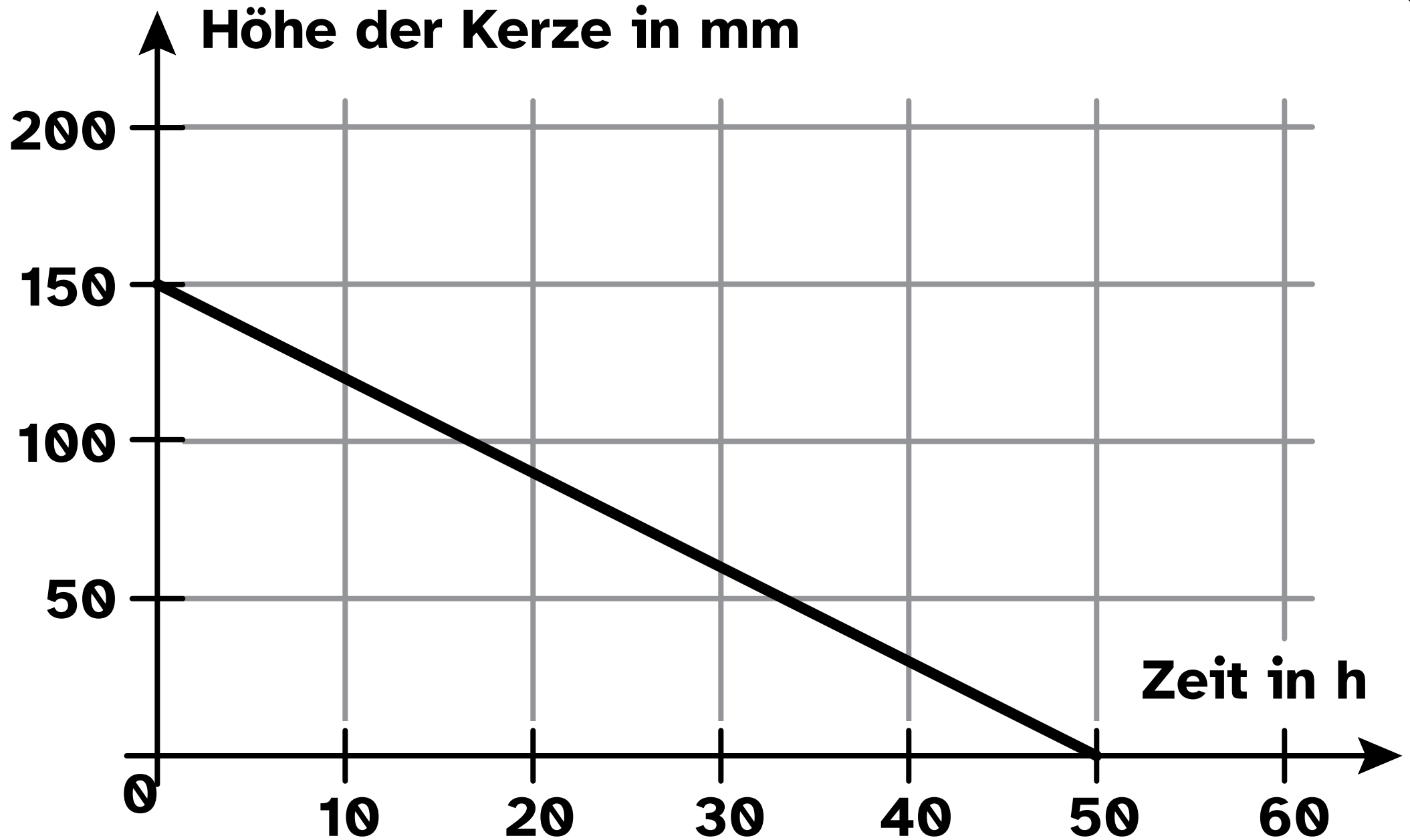
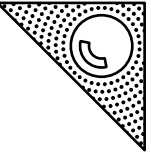
grundlegende Eigenschaften reeller Funktionen

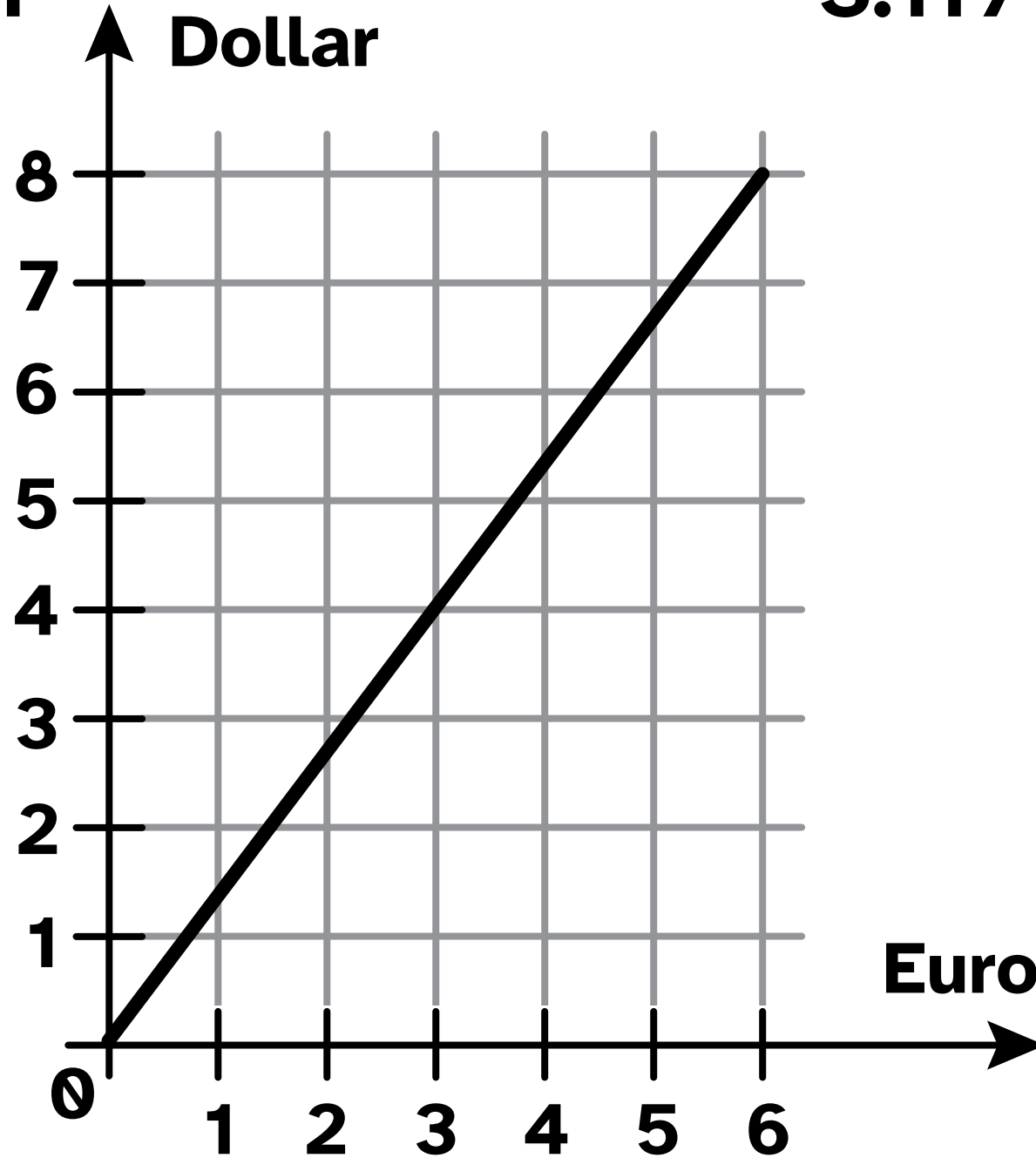
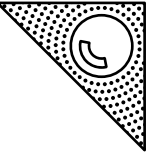


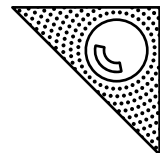




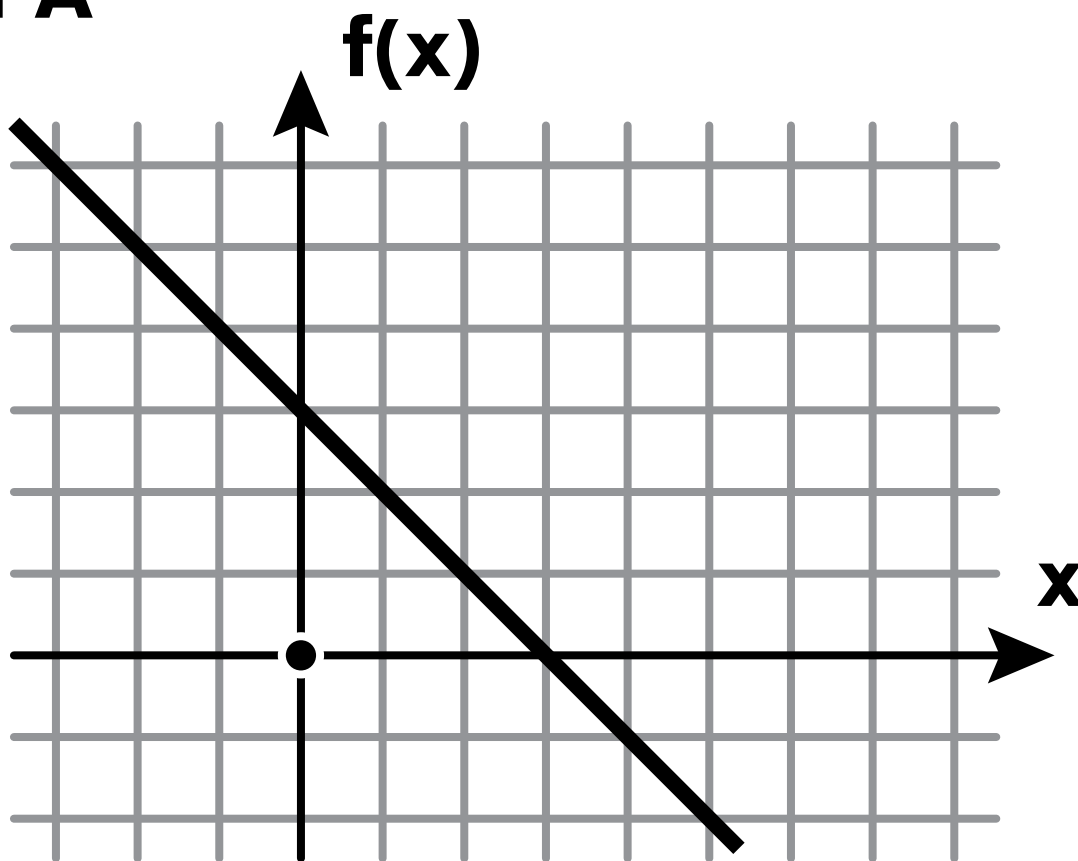




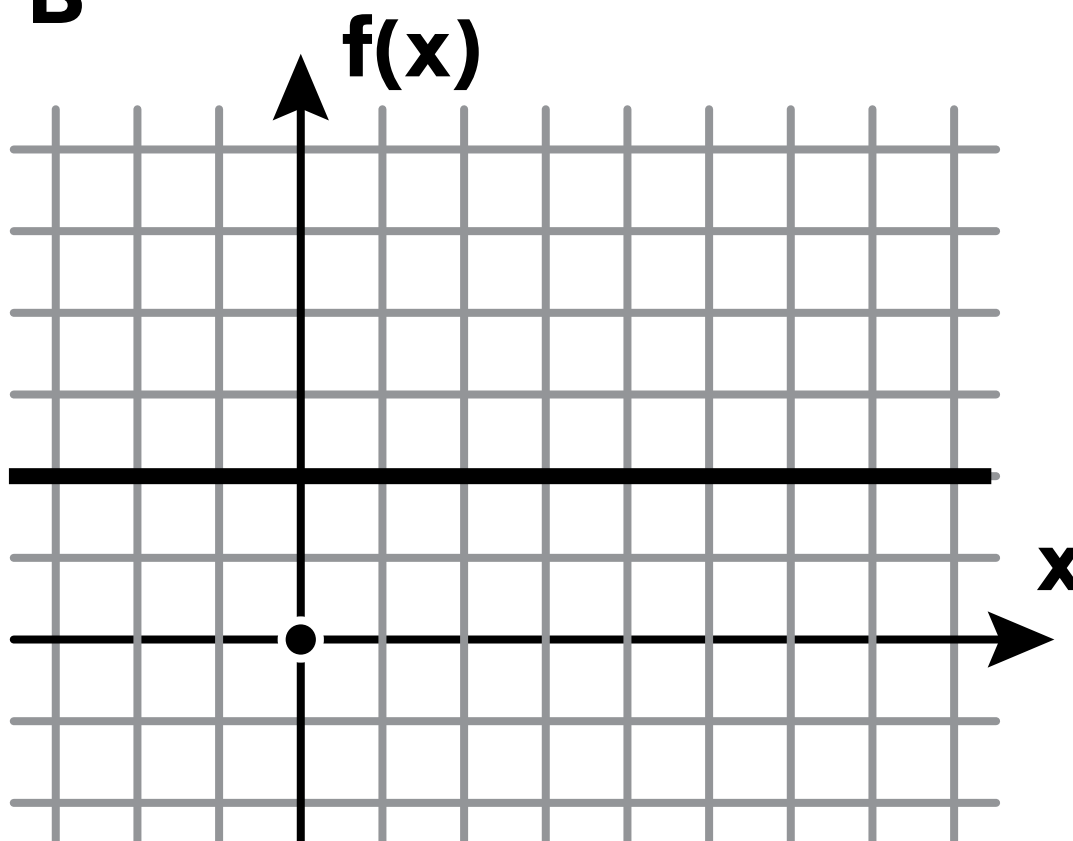


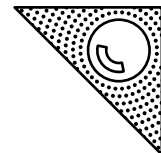


Graph A

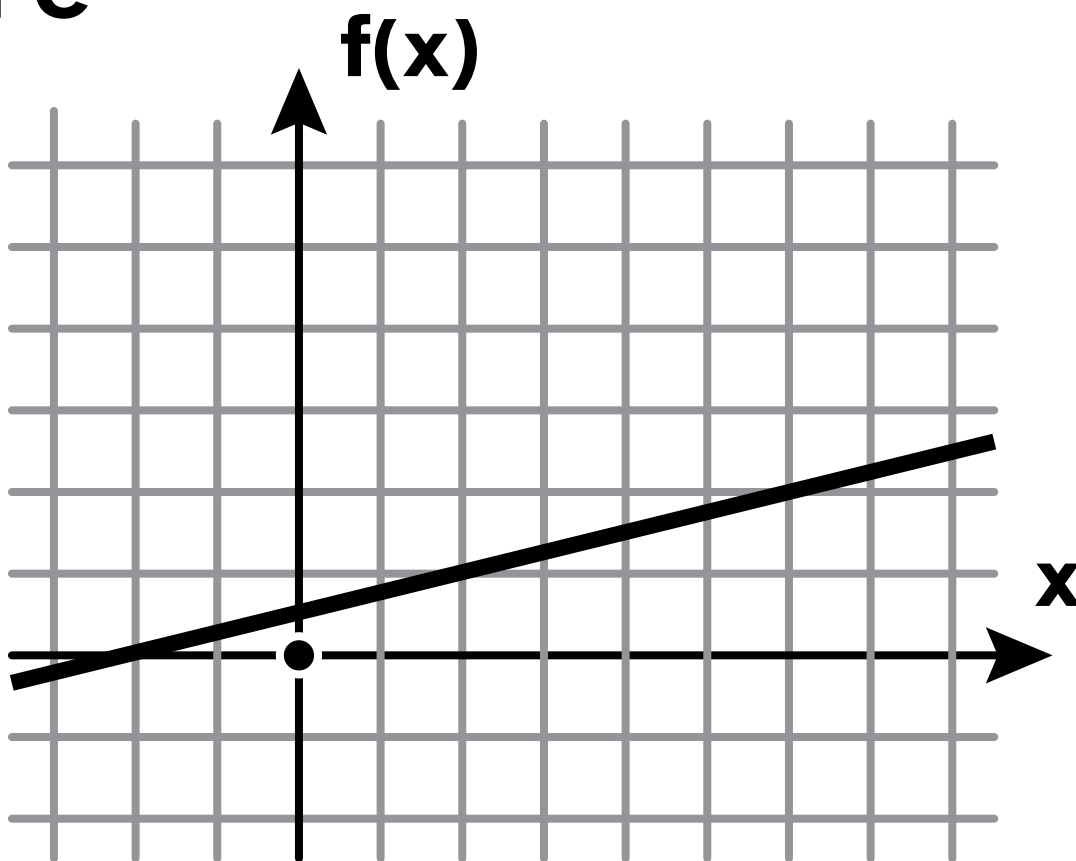


Graph B

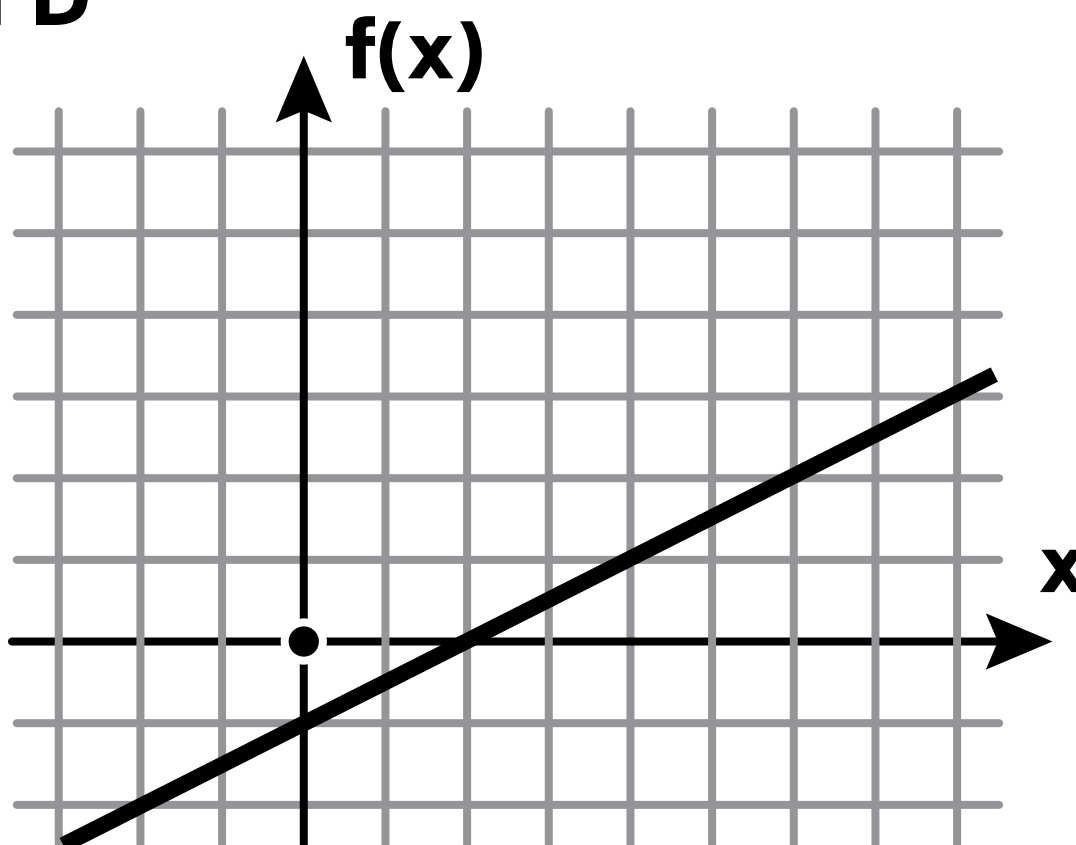


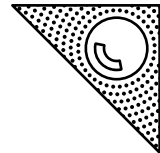


Graph C

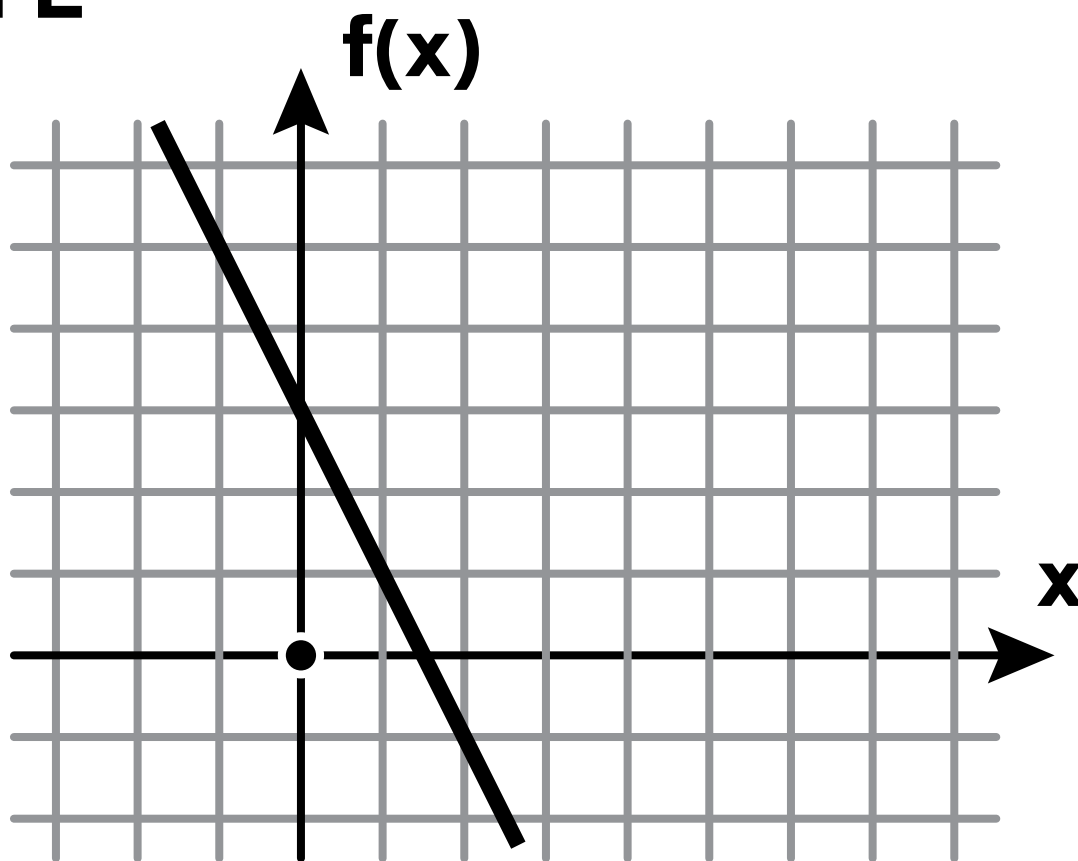


Graph D

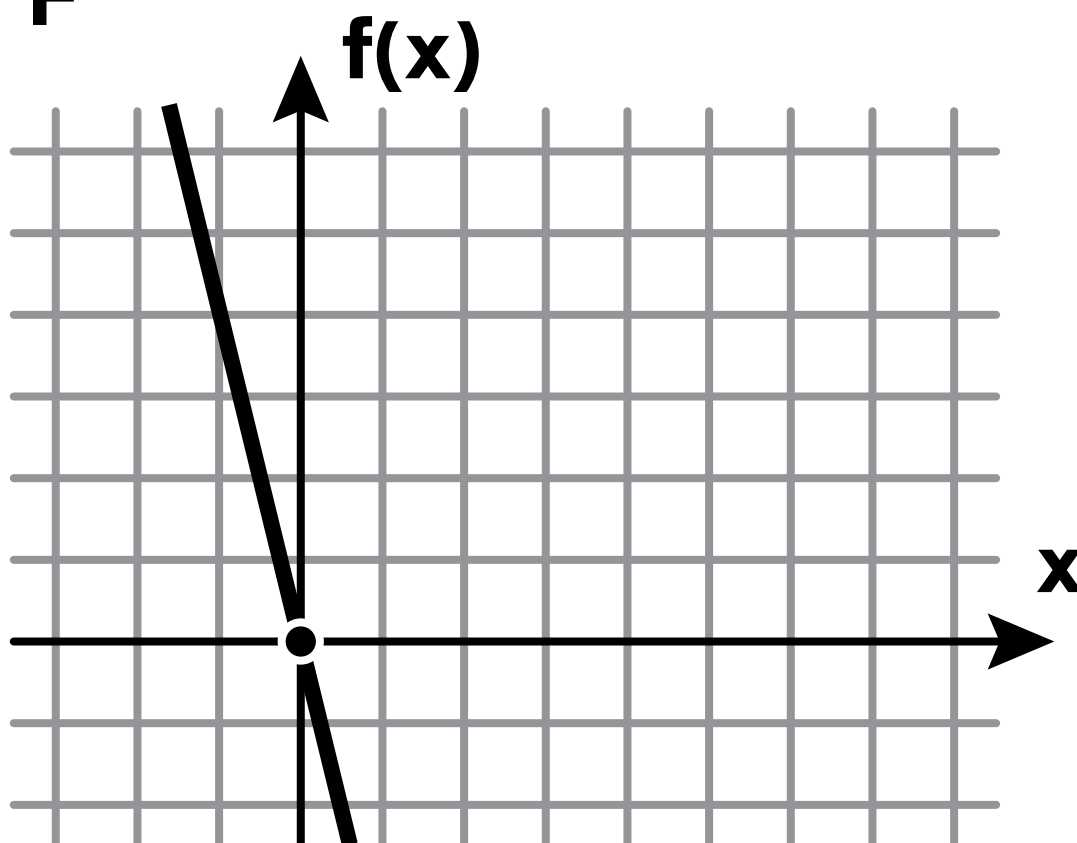


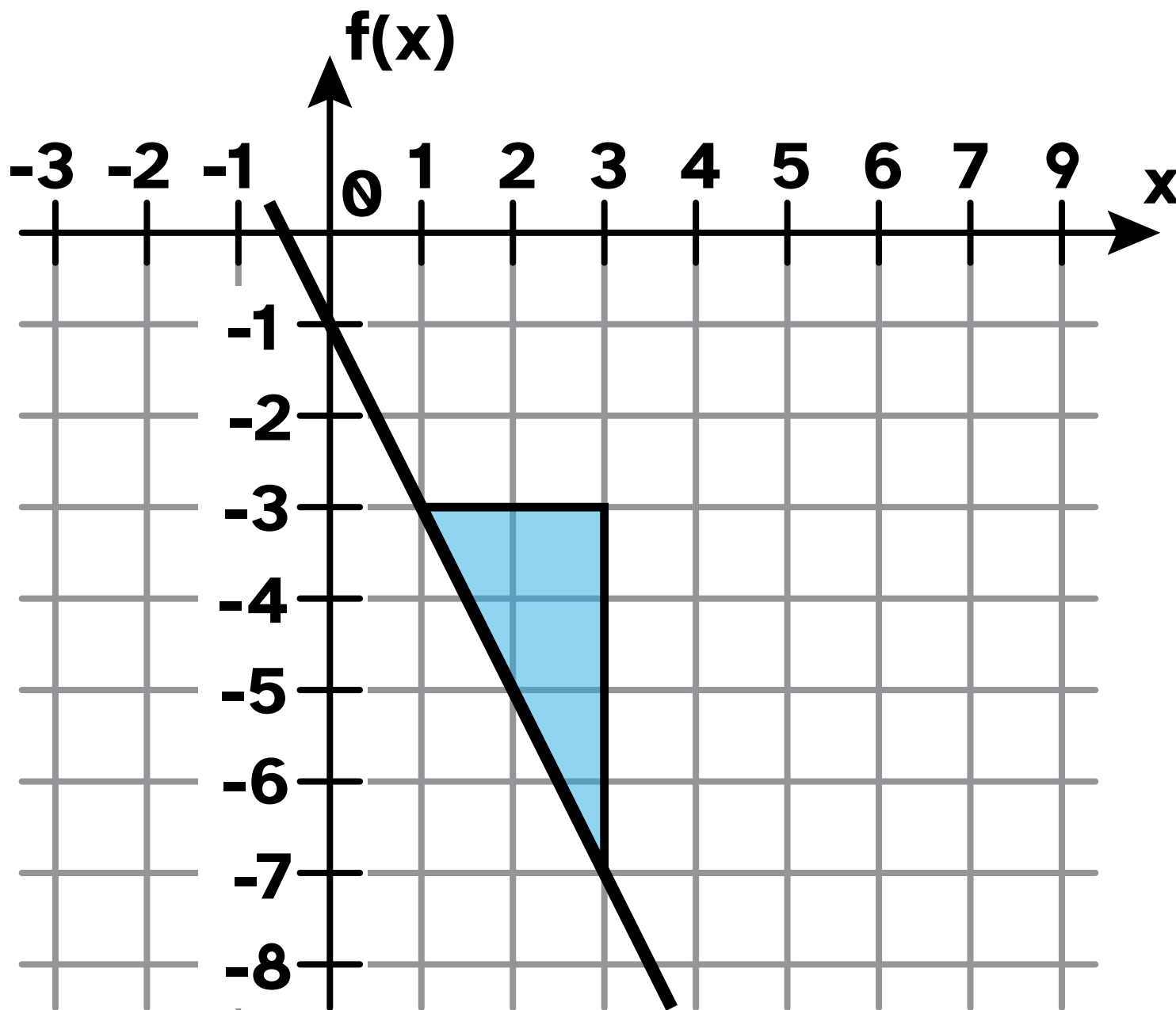
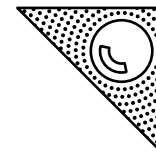


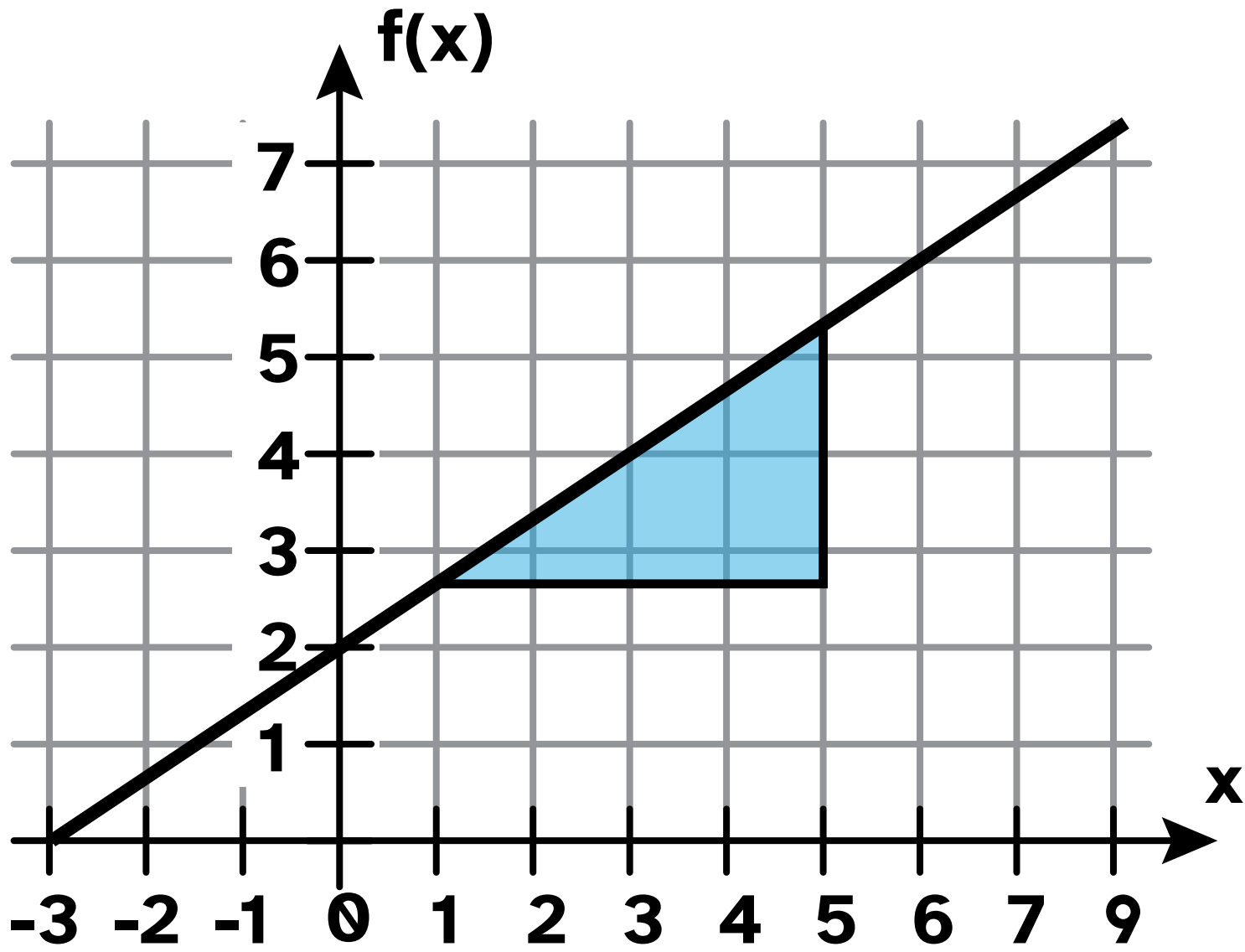
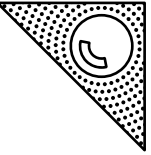
Graph E

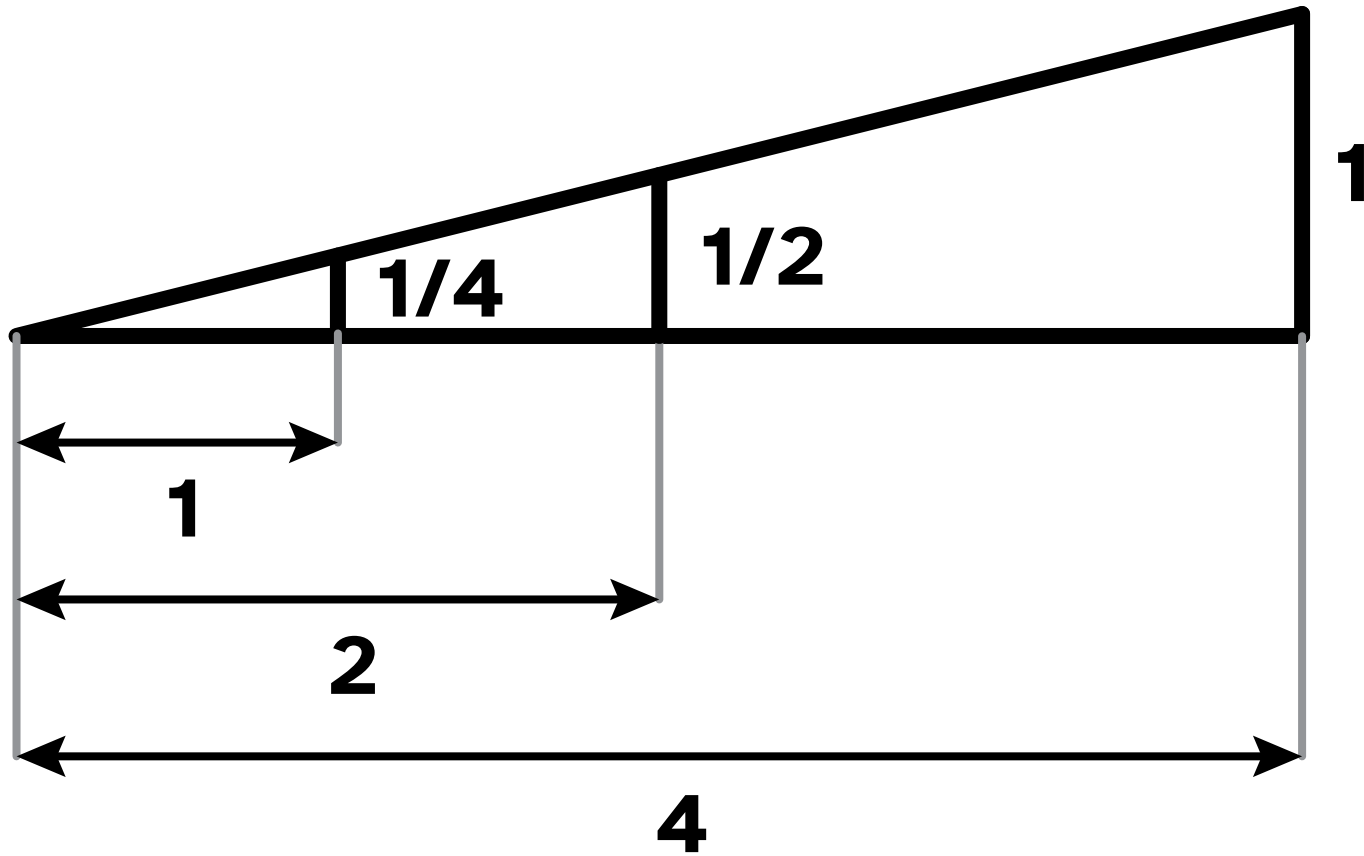
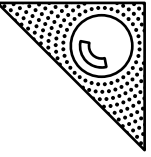


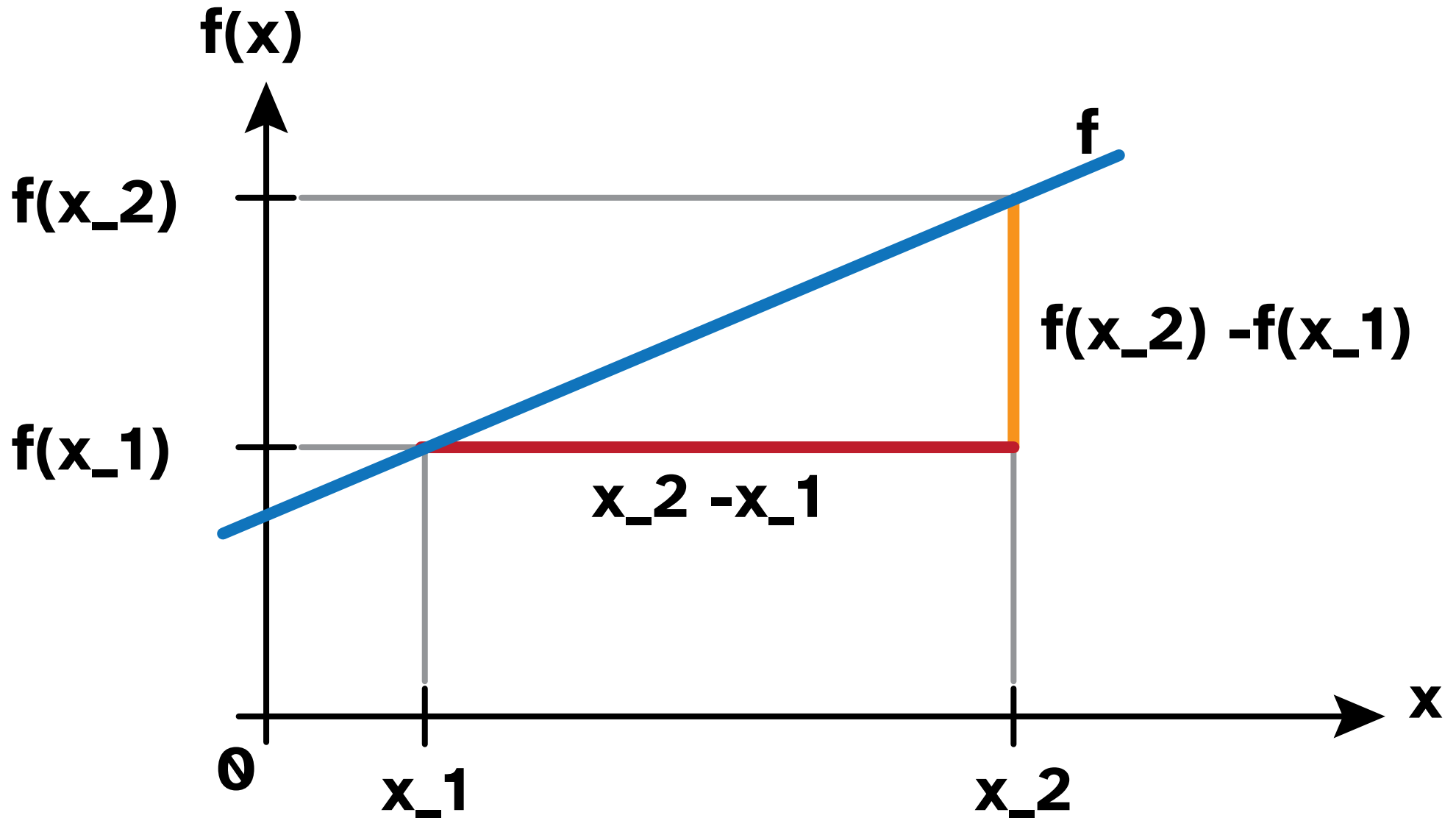
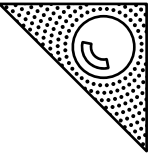
Graph F

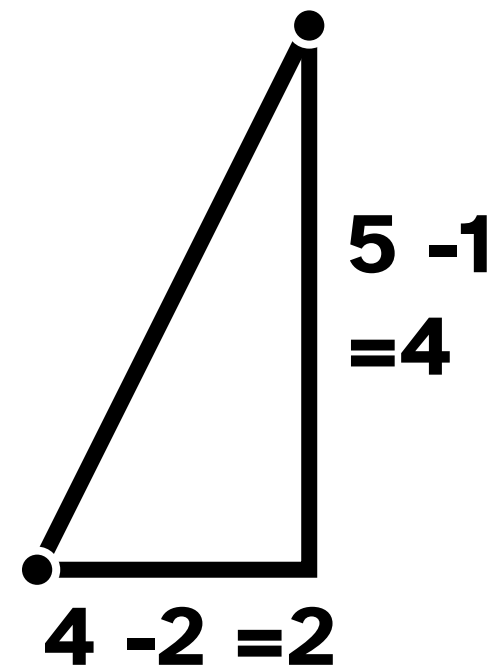
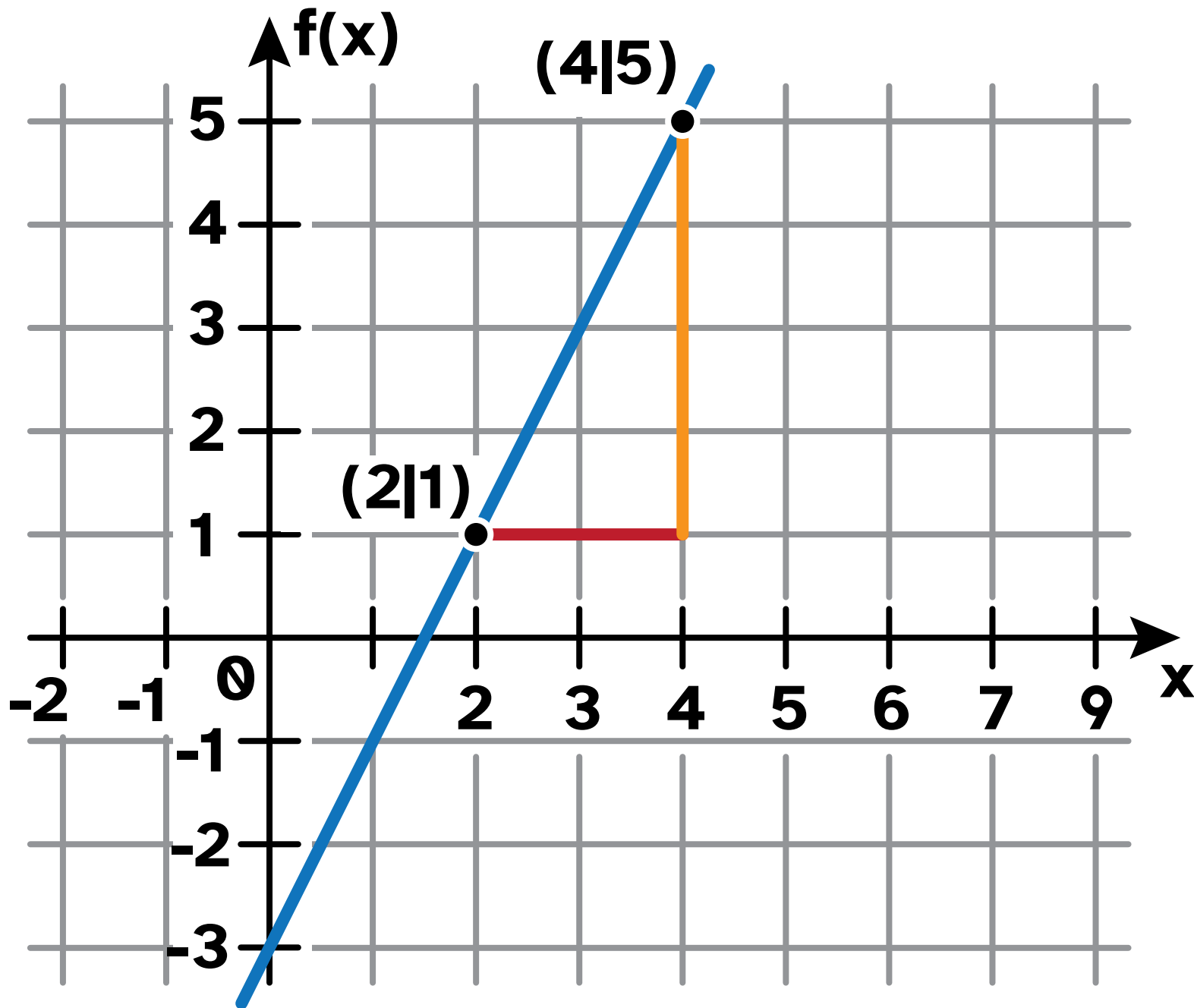
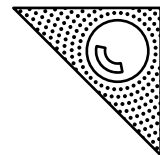


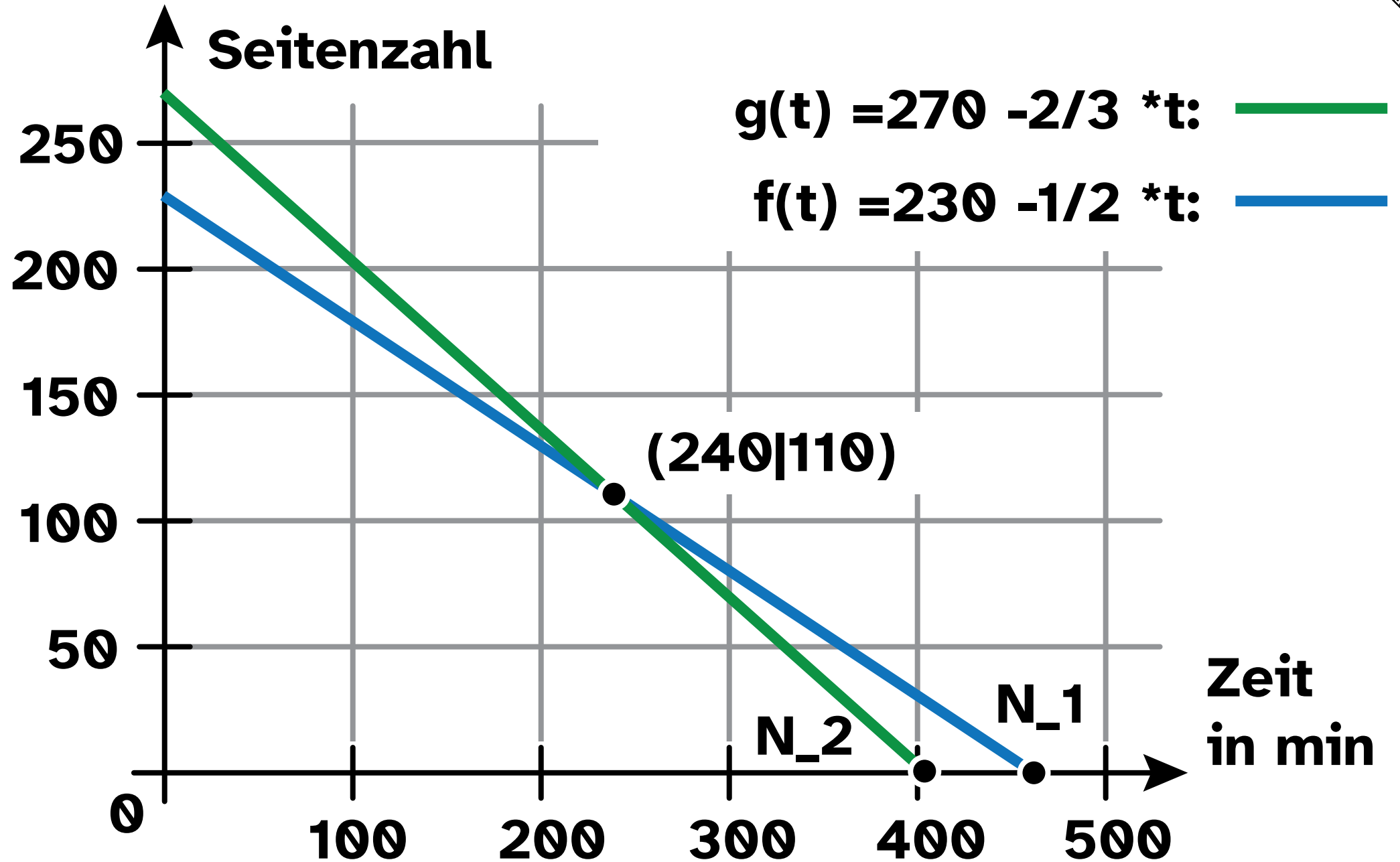
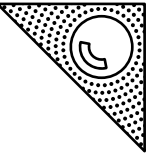


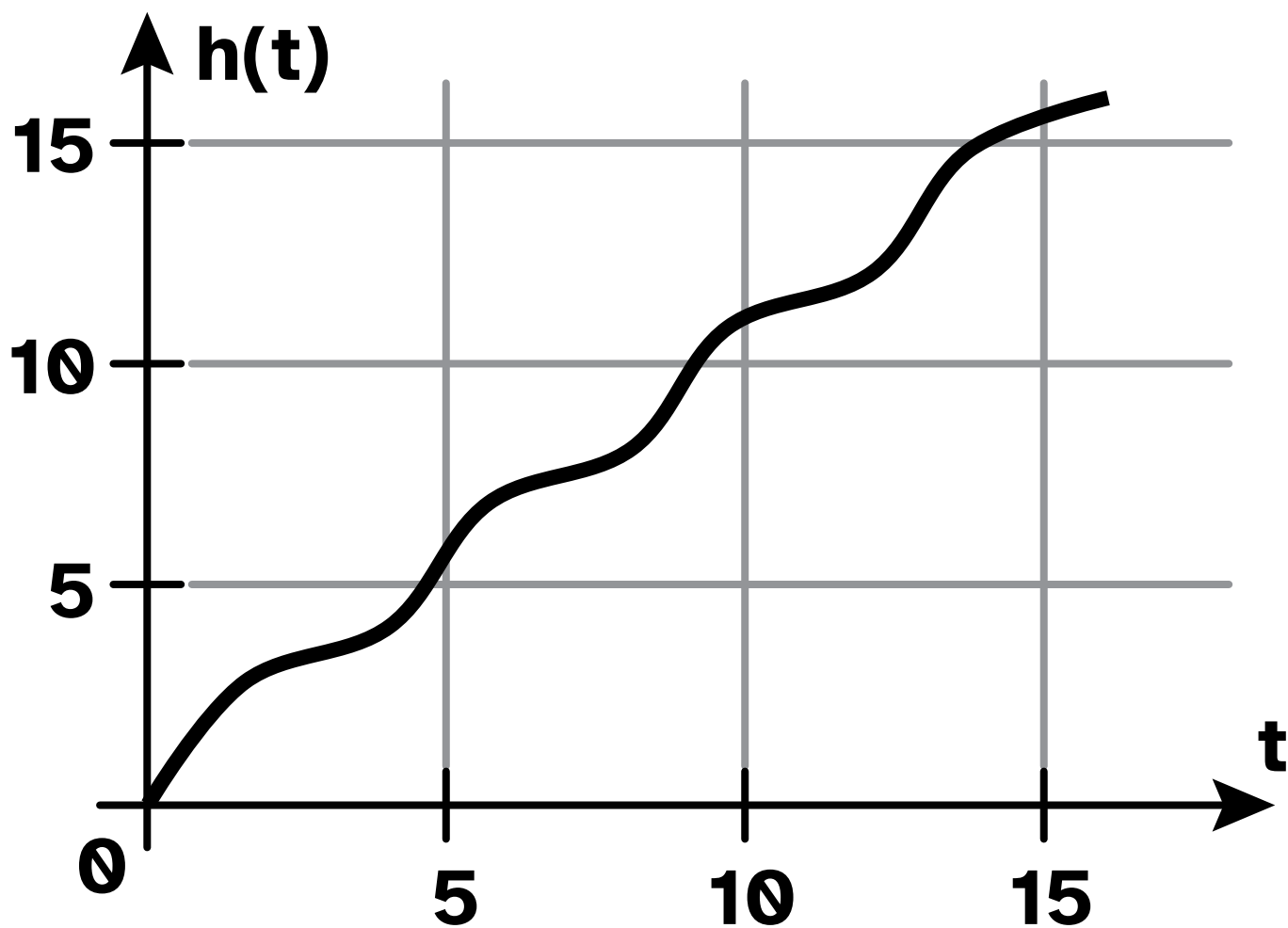
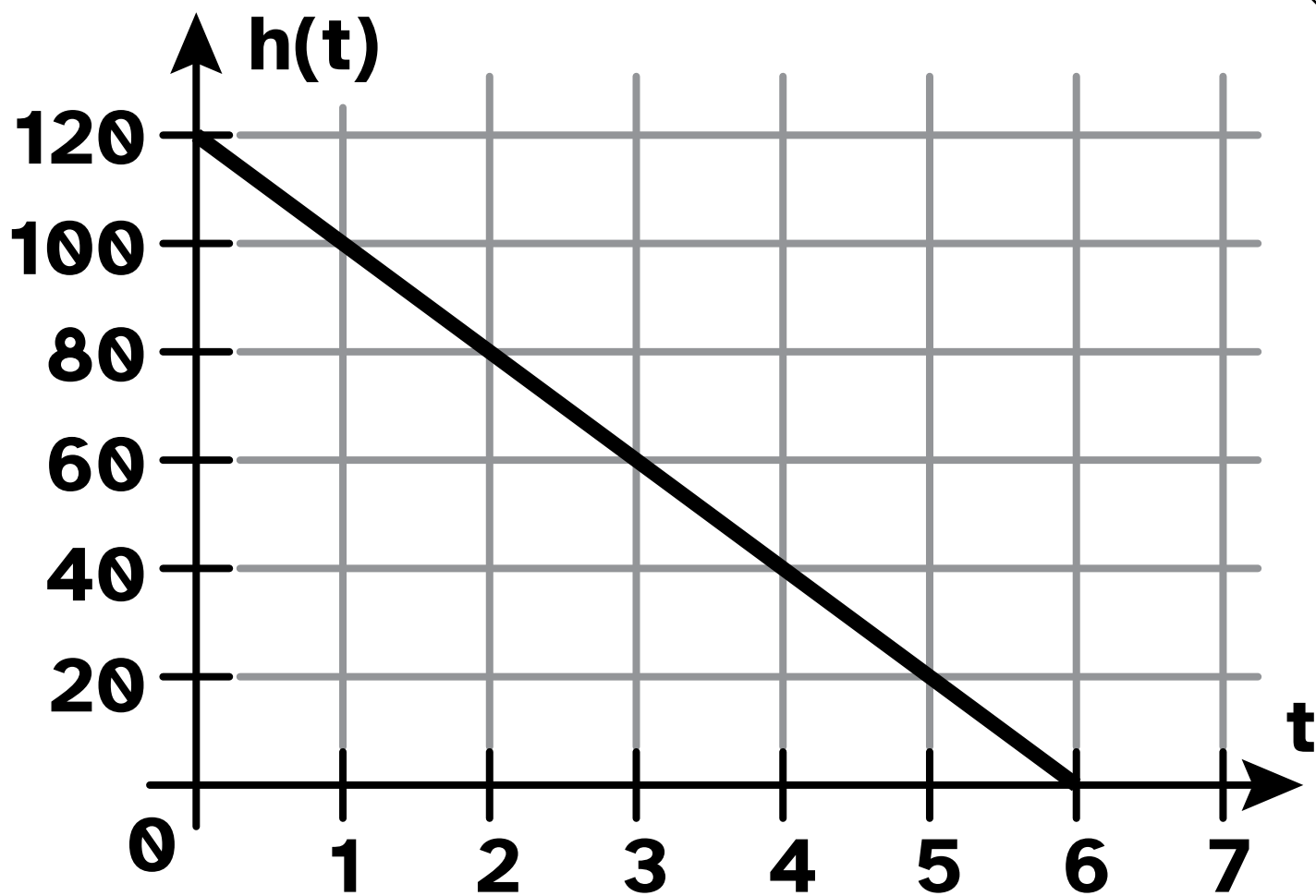


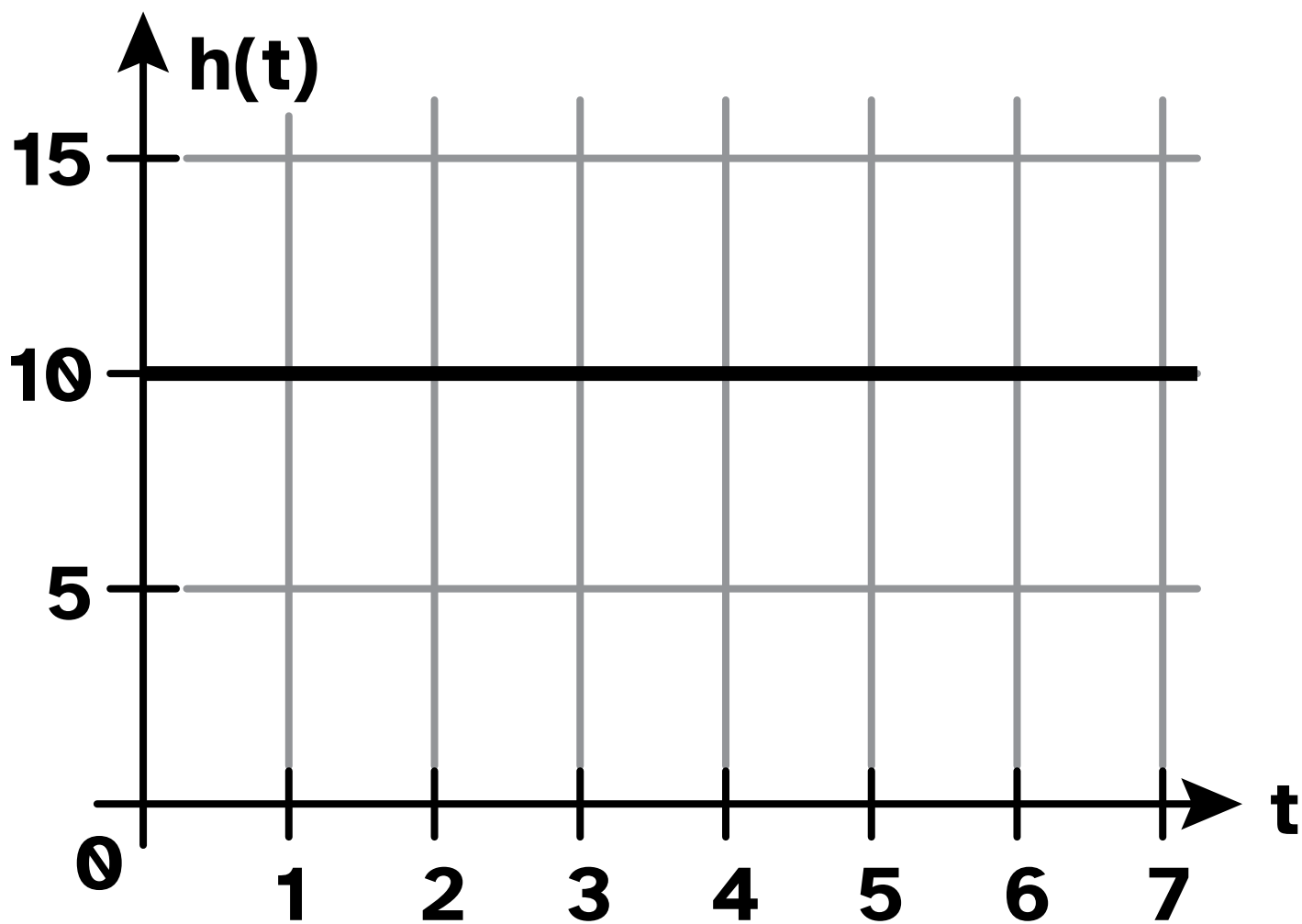
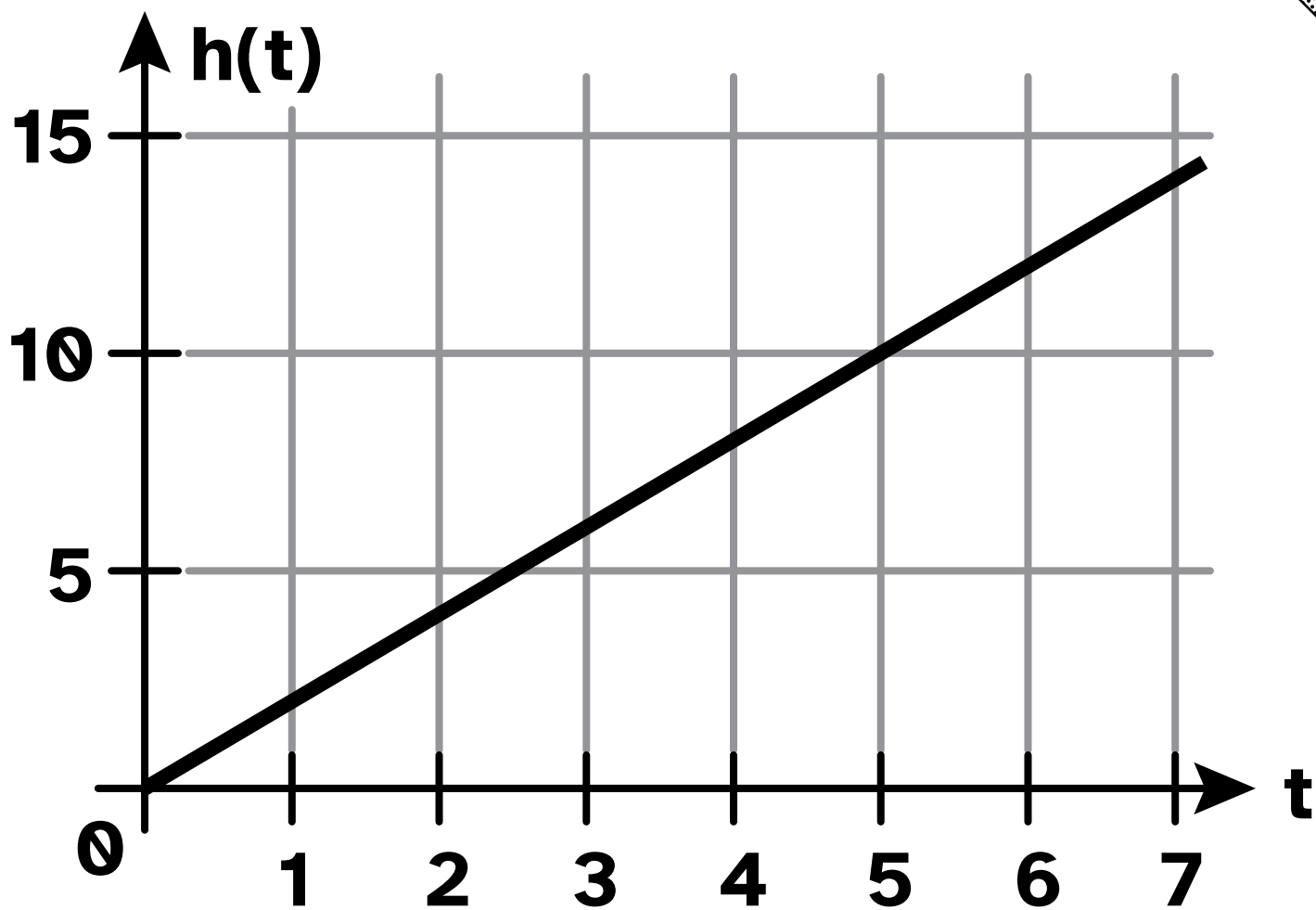


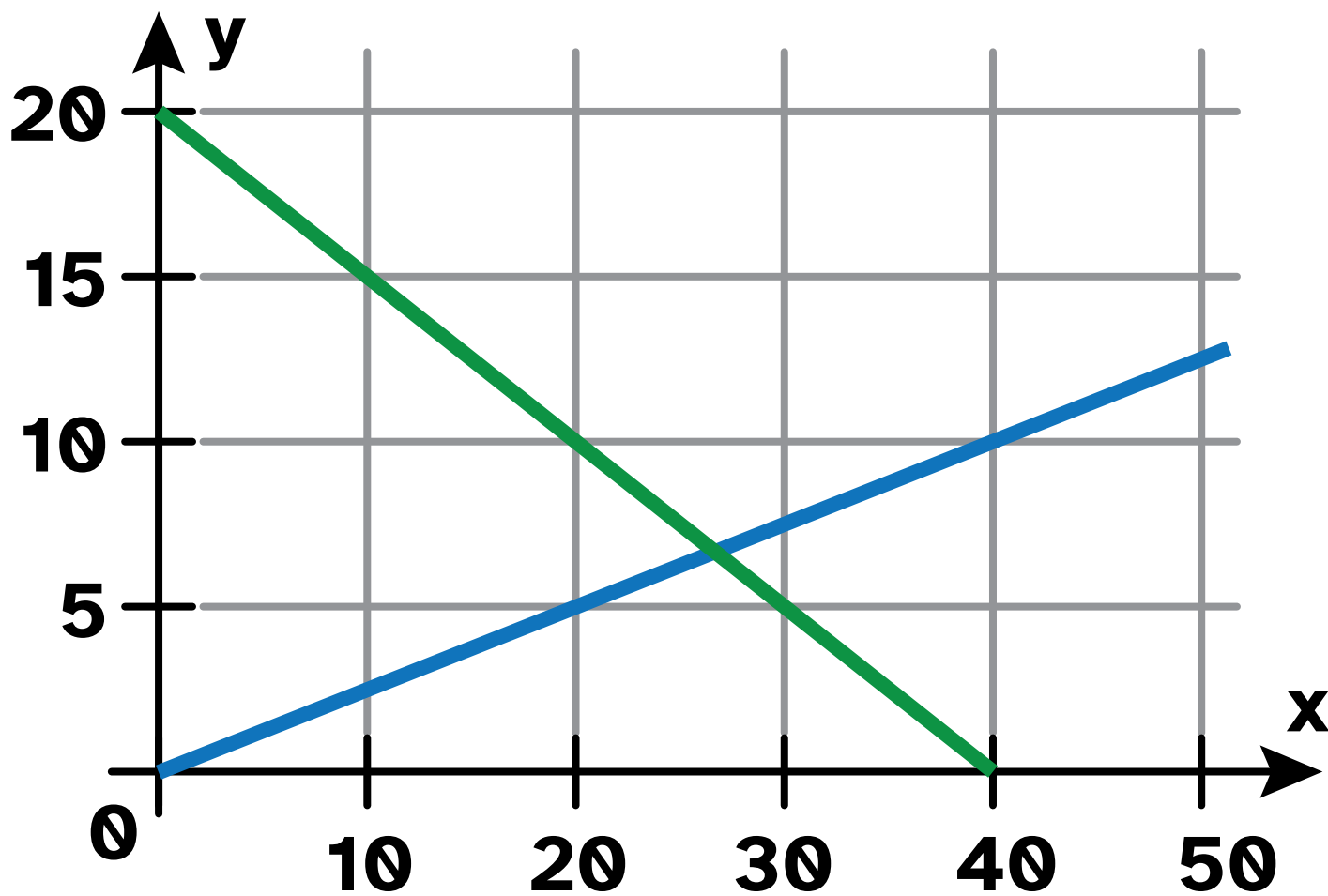
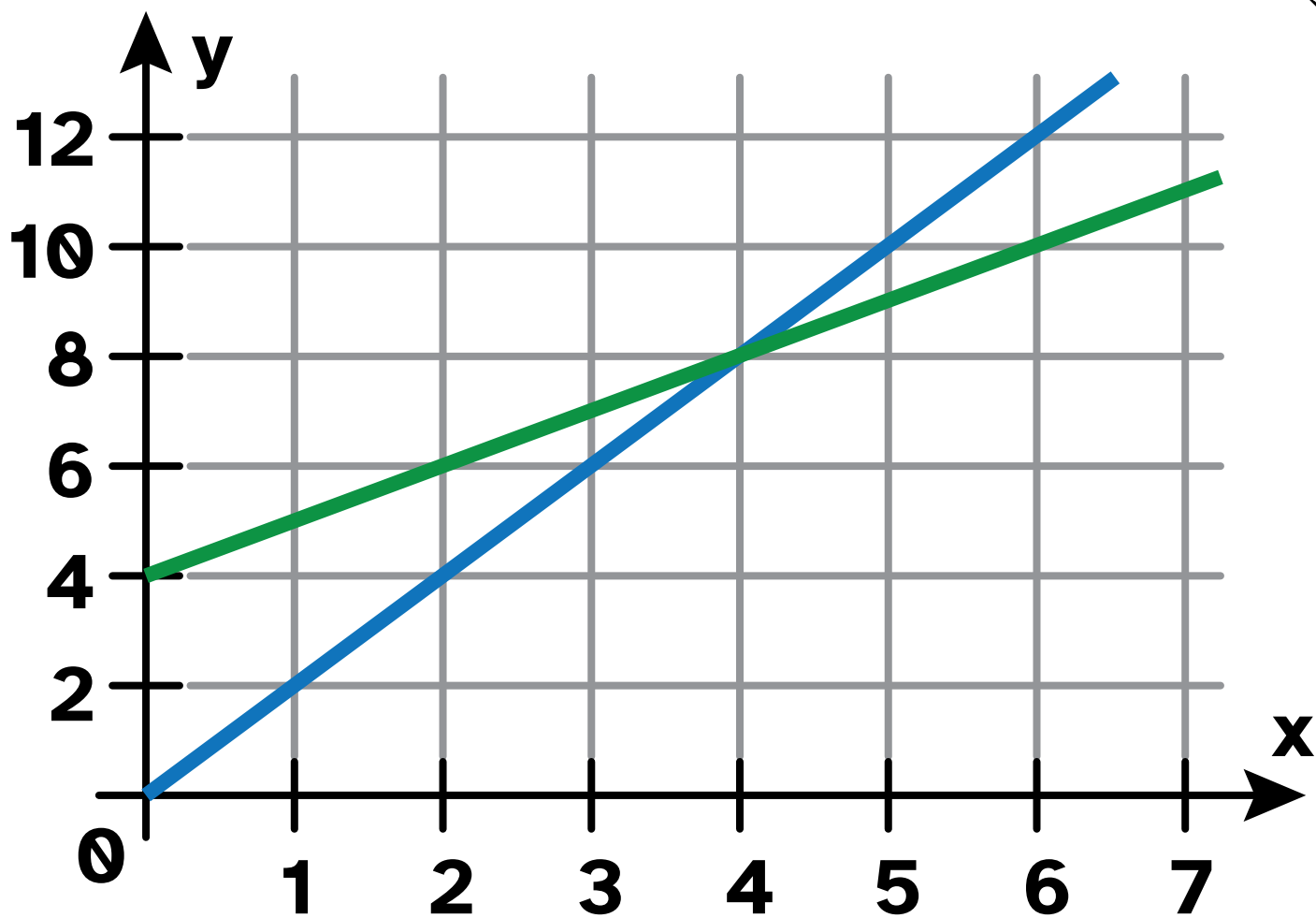


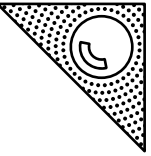




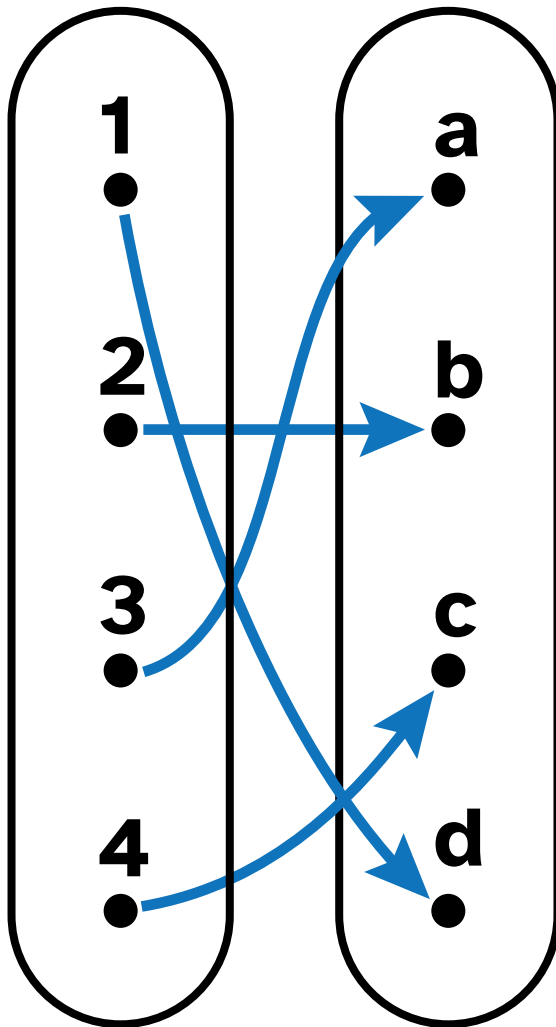








Funktion f:



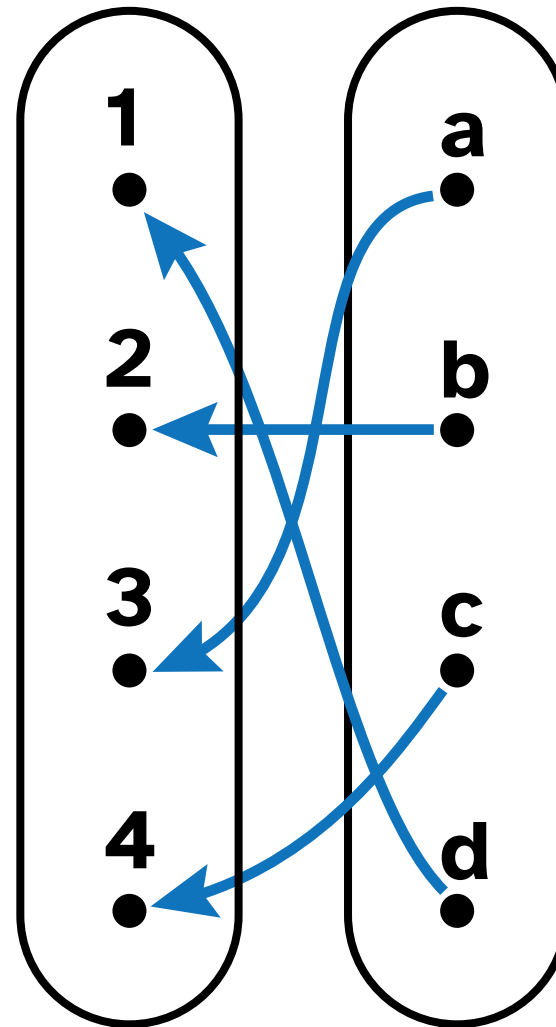
$$f(1) = d$$

$$f(2) = b$$

$$f(3) = a$$

$$f(4) = c$$

Umkehrfunktion f^{-1} :

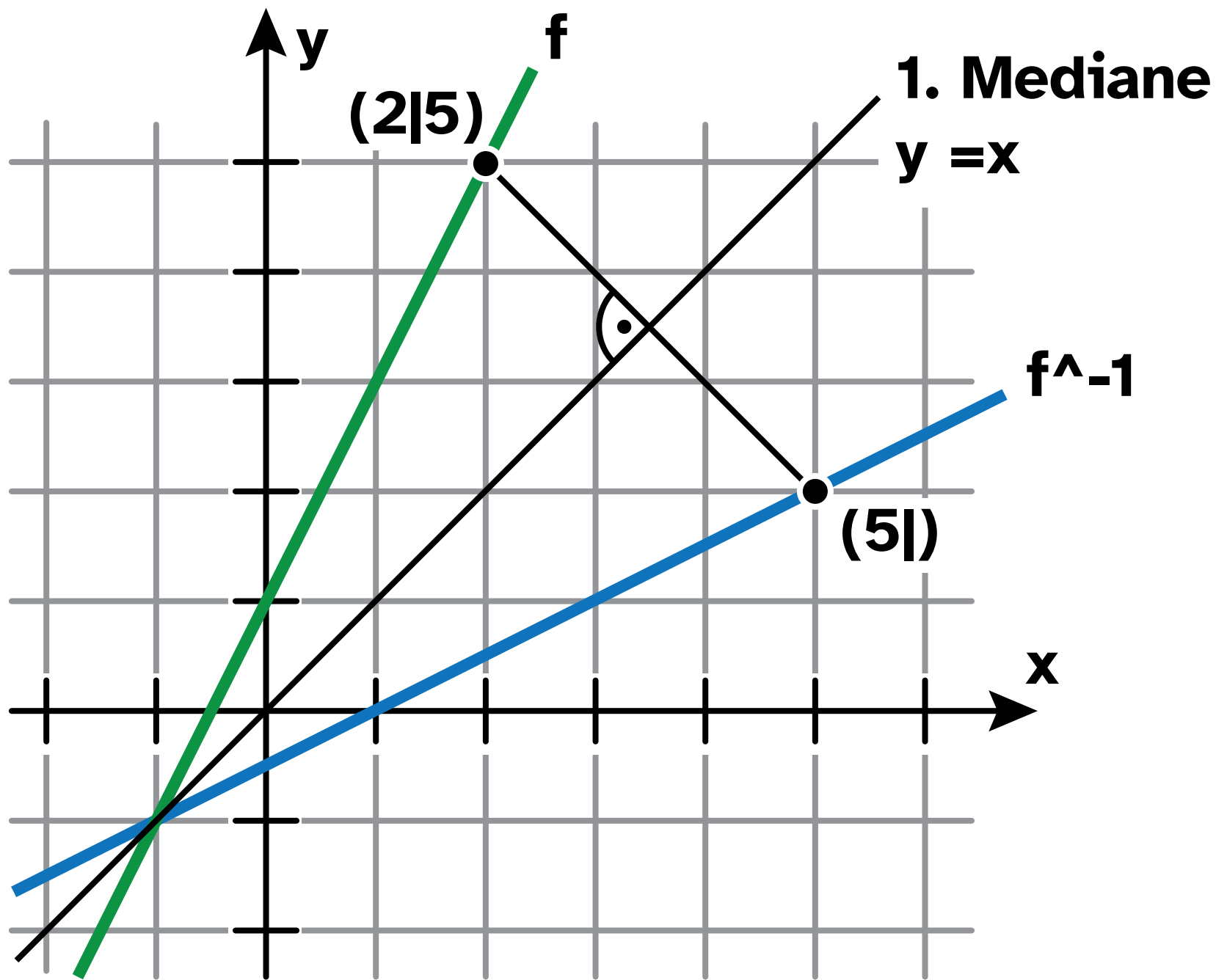
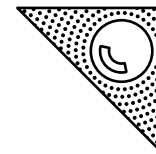


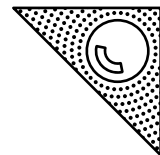
$$f^{-1}(a) = 3$$

$$f^{-1}(b) = 2$$

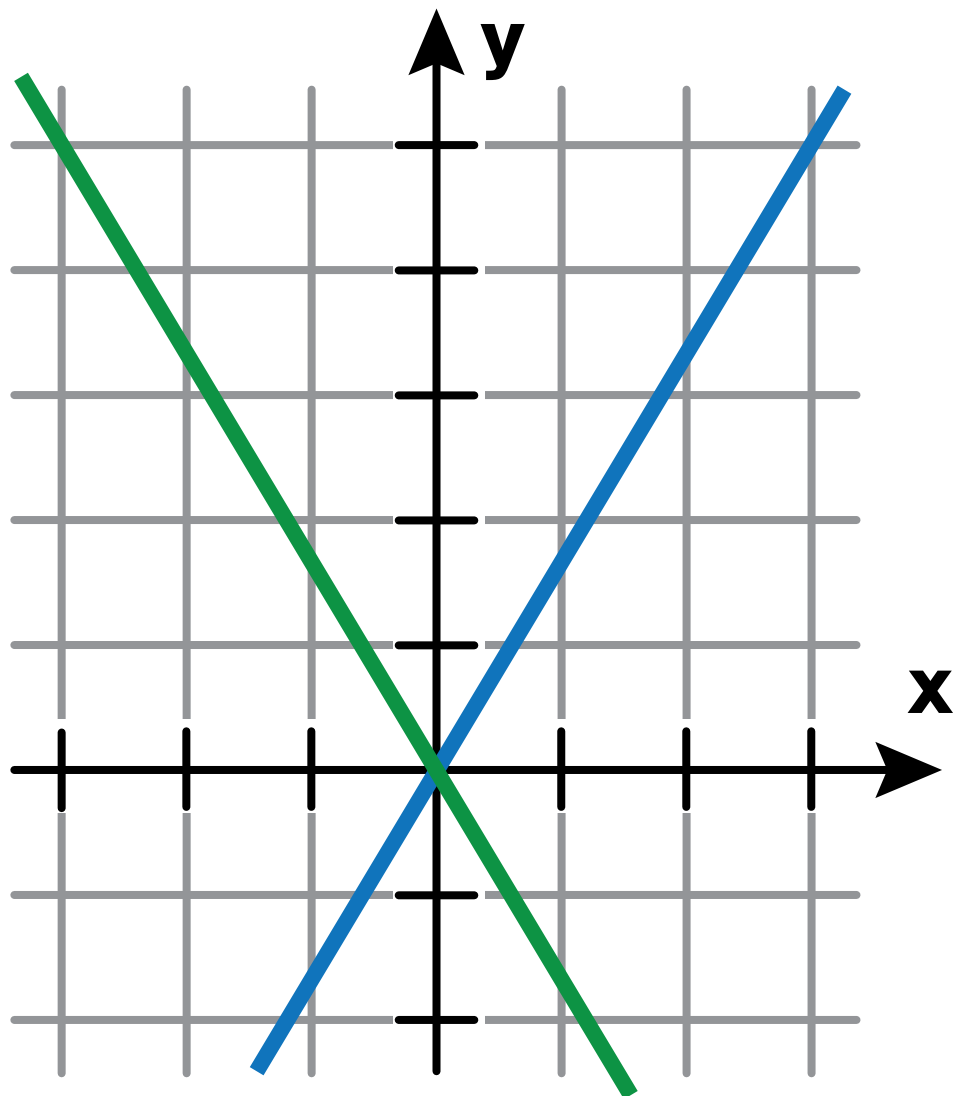
$$f^{-1}(c) = 4$$

$$f^{-1}(d) = 1$$

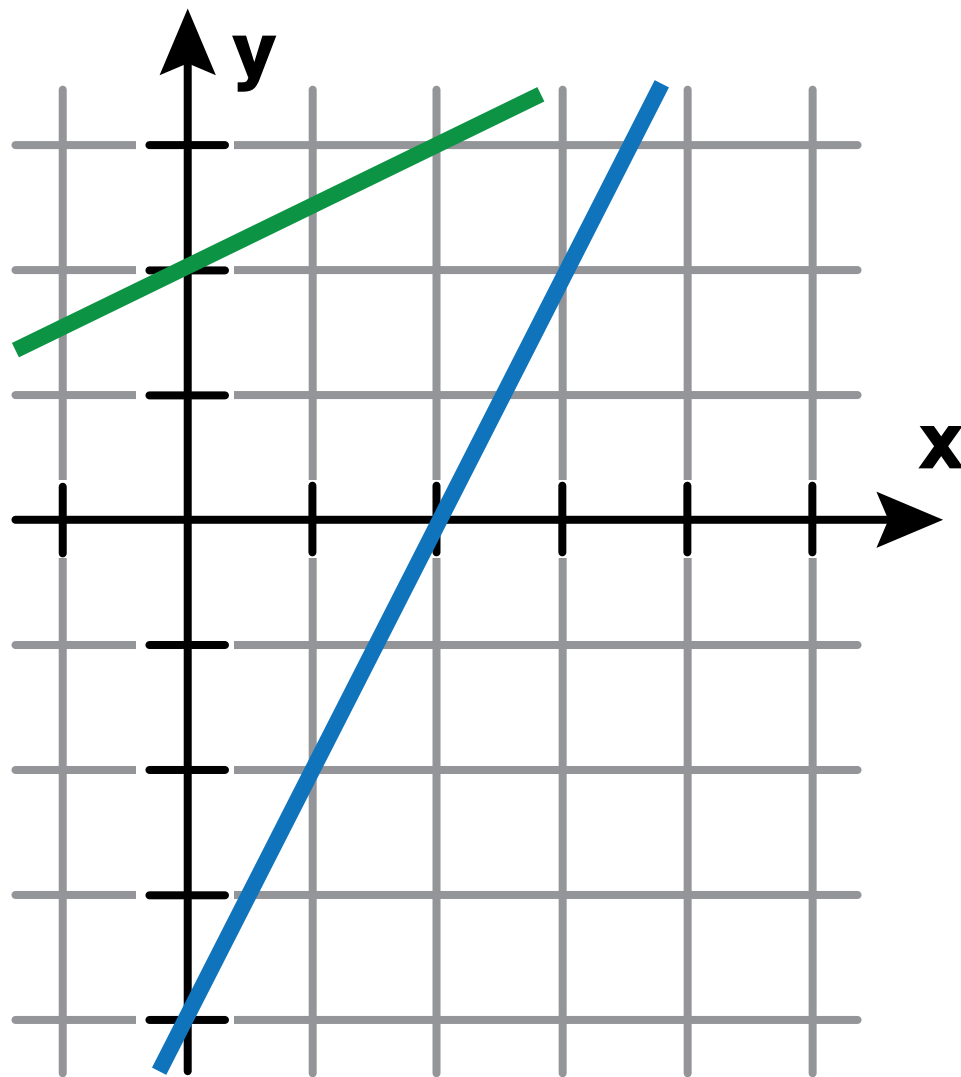


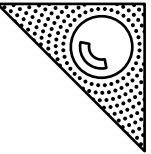


a)



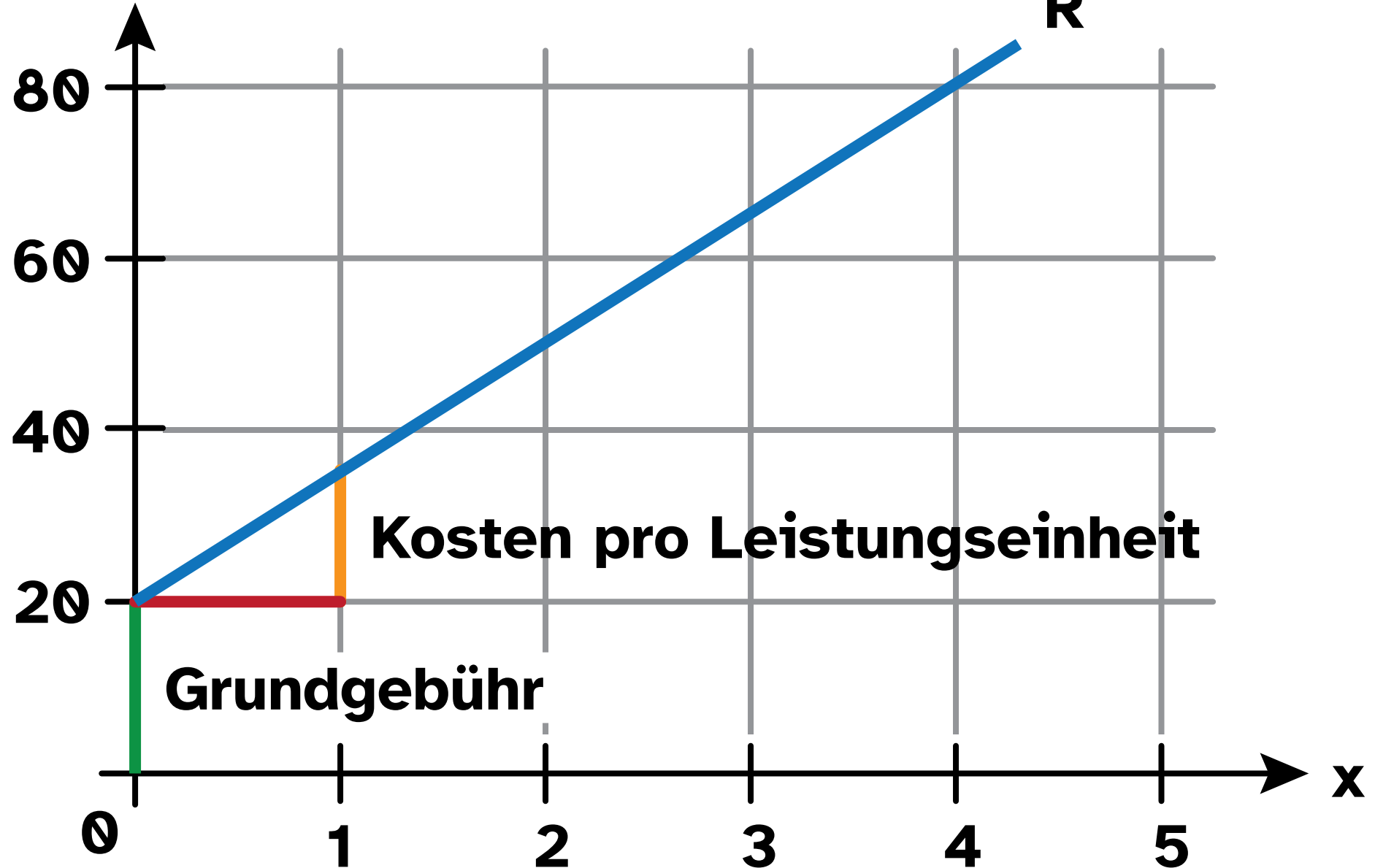
b)

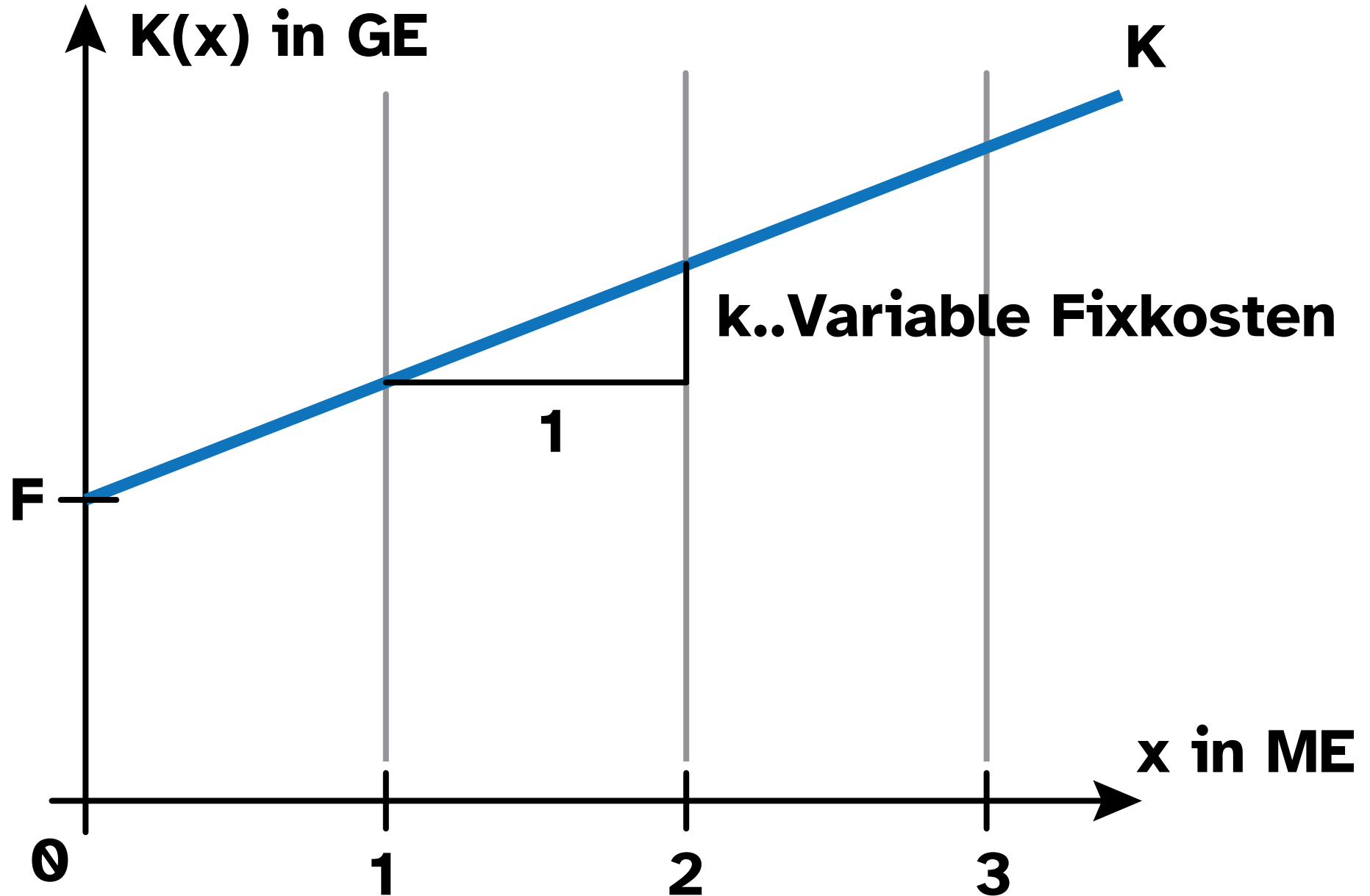
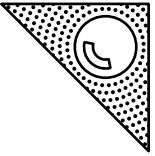


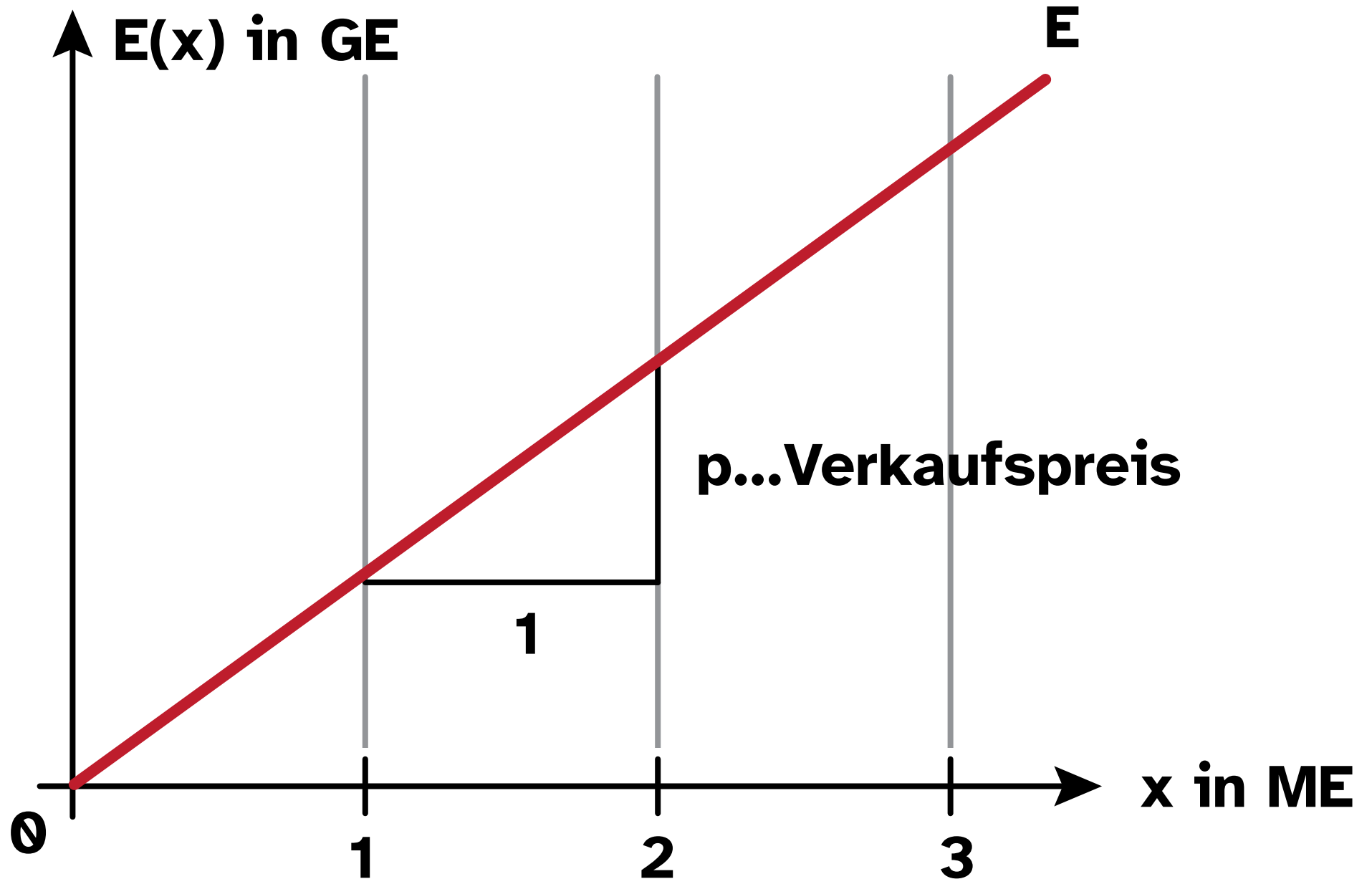
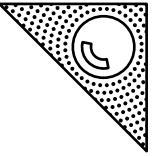
 $R(x)$ in EUR

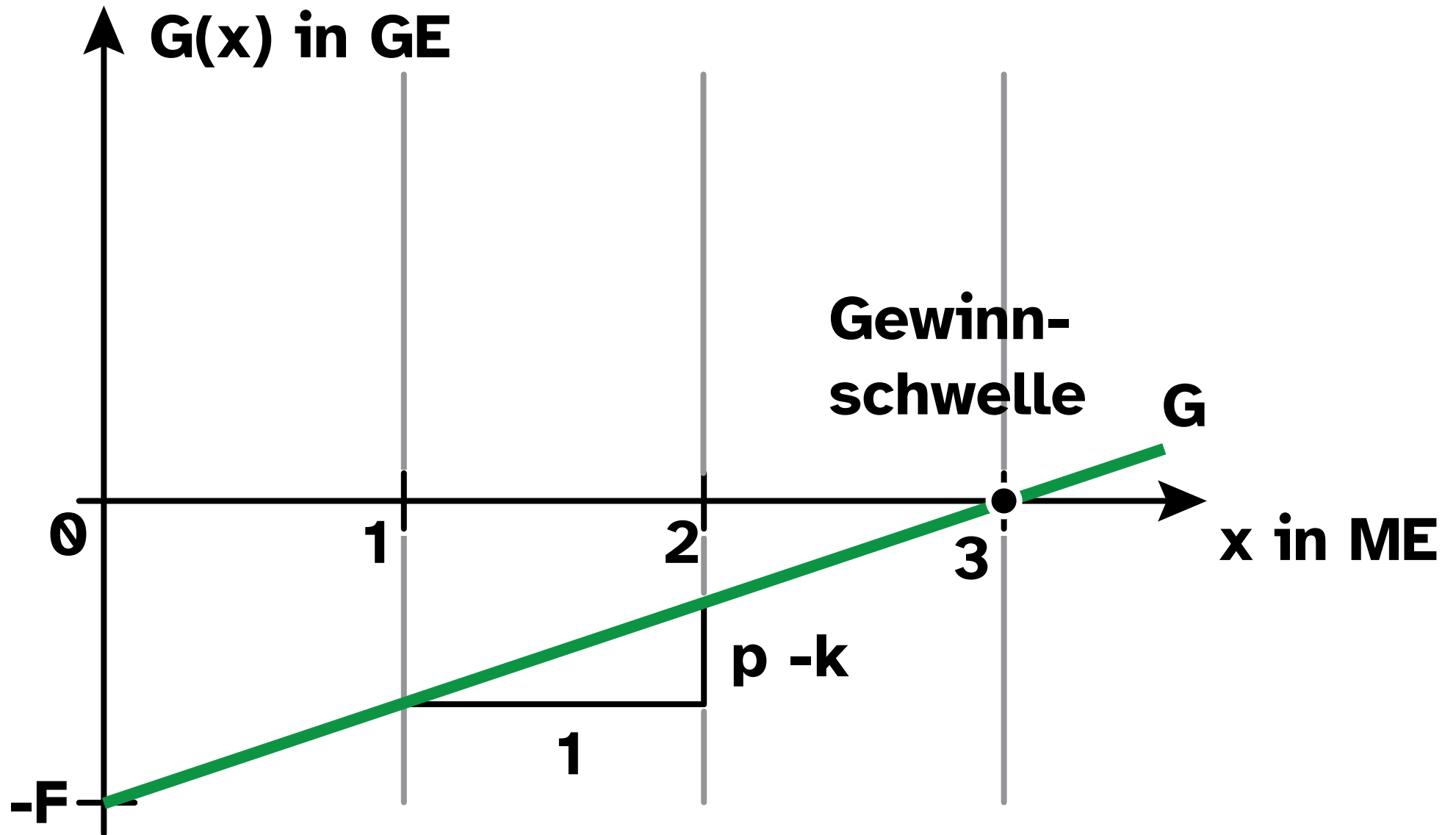
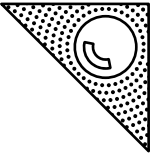
$$R(x) = 35 \cdot x + 20$$

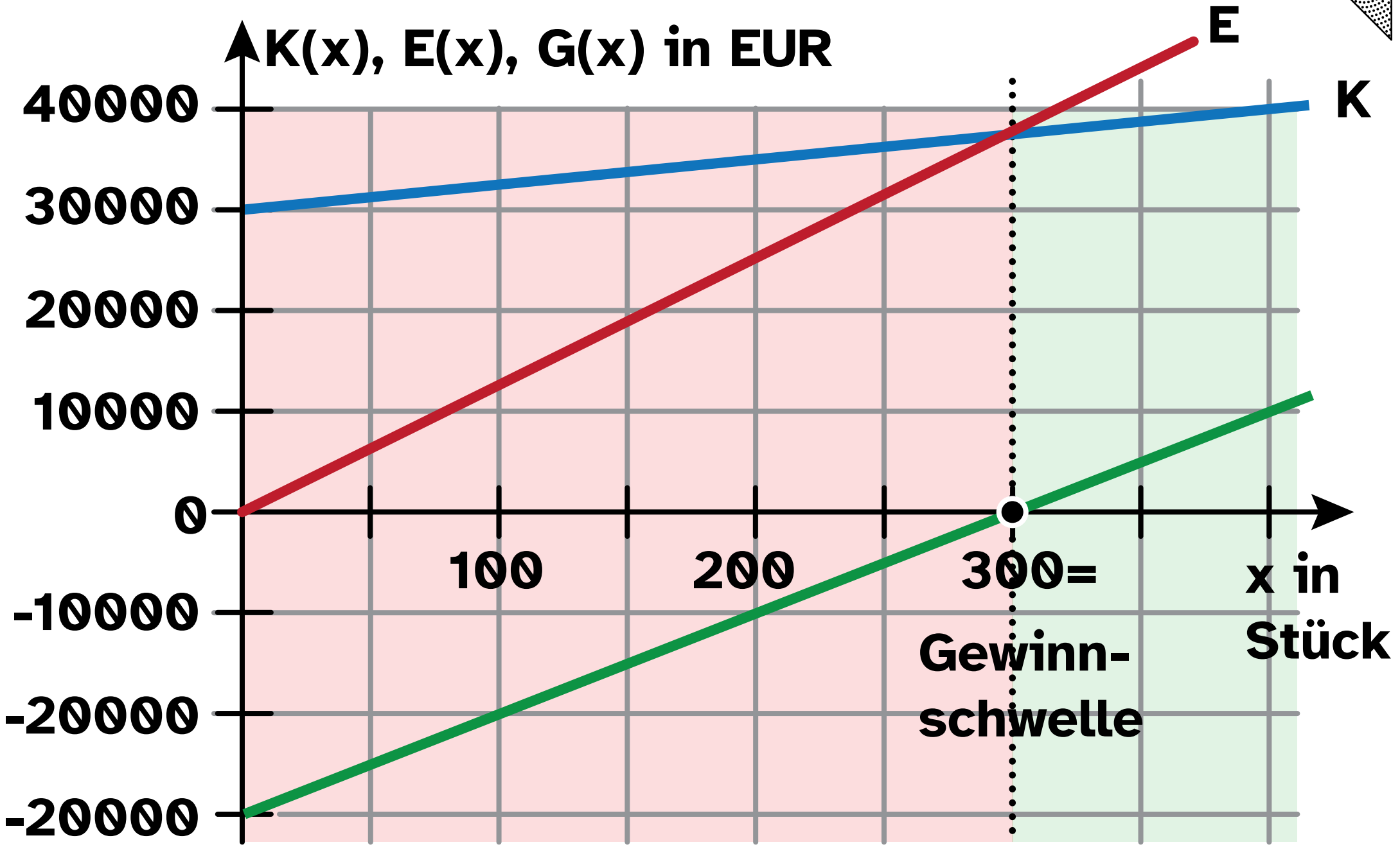
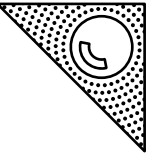
R

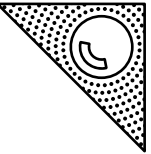




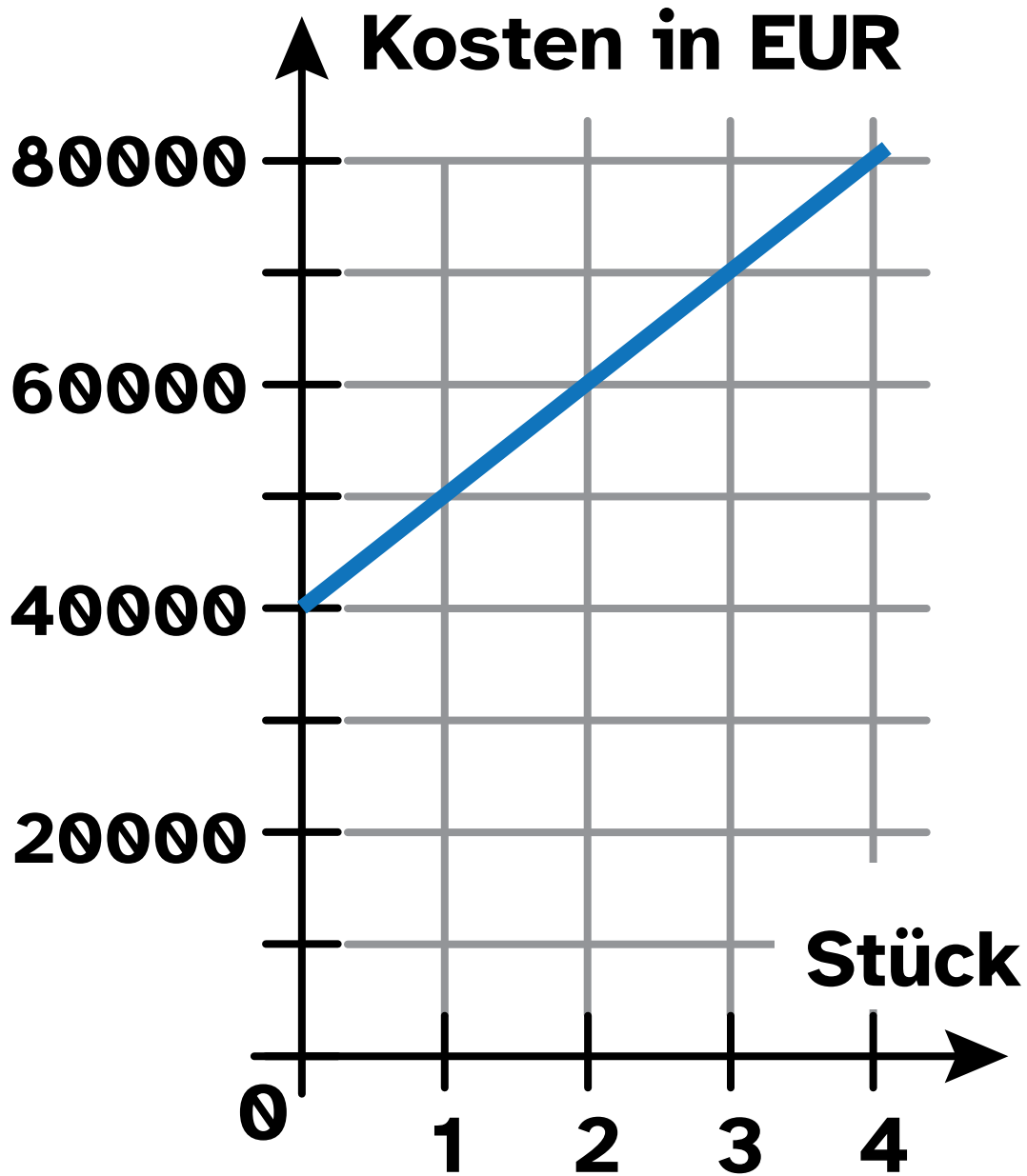








a)



b)

