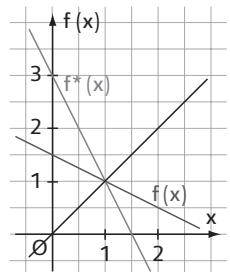


Umkehrfunktion einer linearen Funktion

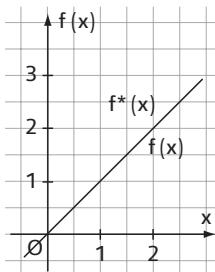
Arbeitsblatt – Lösungen

1

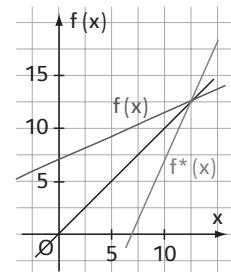
a) $f^*(x) = -\frac{1}{2}x + \frac{3}{2}$



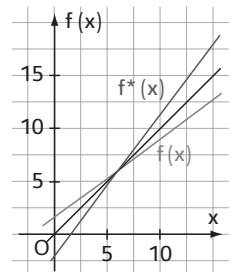
b) $f^*(x) = x$



c) $f^*(x) = \frac{9}{4}x - \frac{63}{4}$

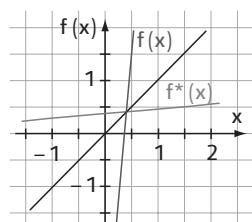


d) $f^*(x) = \frac{3}{4}x + \frac{3}{2}$

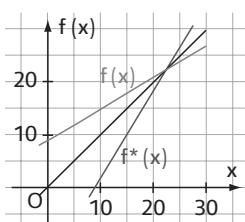


2

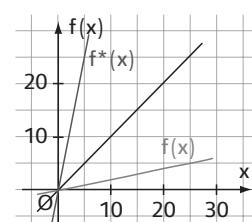
a) $f^*(x) = \frac{1}{11}x + \frac{4}{11}$



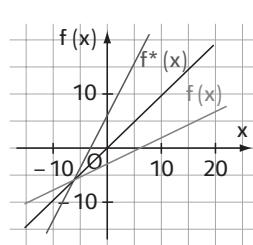
b) $f^*(x) = \frac{5}{3}x - 15$



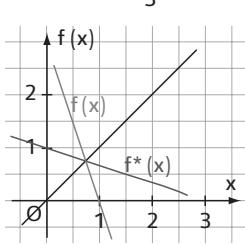
c) $f^*(x) = 5x$



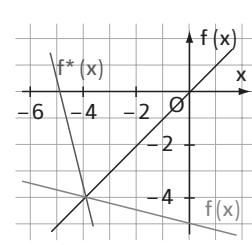
d) $f^*(x) = 2x + 6$



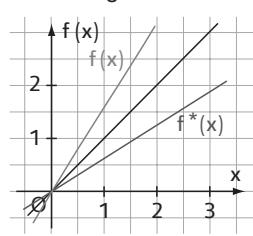
e) $f^*(x) = 1 - \frac{x}{3}$



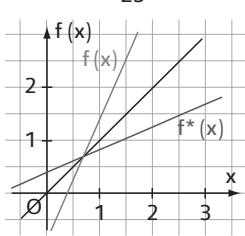
f) $f^*(x) = -4x - 20$



g) $f^*(x) = \frac{5x}{8}$



h) $f^*(x) = \frac{10x + 9}{23}$



3

a) $g: y = 3x - 13$

$g^*: y = \frac{1}{3}x + \frac{13}{3}$

b) $g: y = -2x + 3$

$g^*: y = -\frac{x}{2} + \frac{3}{2}$

c) $g: y = -\frac{1}{3}x - \frac{5}{6}$

$g^*: y = -3x - \frac{5}{2}$

d) $g: y = 0,7x + \frac{12}{5}$

$g^*: y = \frac{10}{7}x - \frac{24}{7}$

e) $g: y = 4,5x - \frac{175}{2}$

$g^*: y = \frac{2}{9}x + \frac{175}{9}$

f) $g: y = 0 \quad g^*: x = 0$

keine Funktion

4

a) $g: y = \frac{5}{9}x + \frac{7}{9}$

$g^*: y = \frac{9x}{5} - \frac{7}{5}$

b) $g: y = -\frac{5}{7}x - \frac{1}{7}$

$g^*: y = -\frac{7}{5}x - \frac{1}{5}$

c) $g: y = \frac{371}{270}x - \frac{604}{9}$

$g^*: y = \frac{270}{371}x + \frac{18120}{371}$

d) $g: y = \frac{7}{11}x + \frac{113}{110}$

$g^*: y = \frac{11}{7}x - \frac{113}{70}$

e) $g: y = -\frac{67}{57}x + \frac{581}{570}$

$g^*: y = -\frac{57}{67}x - \frac{581}{670}$

f) $g: y = x$

$g^*: y = x$