Lösung zur Aufg. 1:

$f(x) = 3x + 6$

$y = 3x + 6$

$x = 3y + 6$

$x - 6 = 3y$

$\frac{x-6}{3} = y$

$\frac{1}{3}x-2=y$

$\frac{1}{3}x-2=\bar{f}(x)$

Lösungen zur Aufg. 2:

a) $f(x) = 5x$ $\quad\quad$ $\bar{f}(x) = \frac{1}{5}x$

b) $f(x) = 2x + 8$ $\quad\quad$ $\bar{f}(x) = \frac{1}{2}x-4$

c) $f(x) = 5x - 2$ $\quad\quad$ $\bar{f}(x) = \frac{1}{5}x+\frac{2}{5}$

d) $f(x) = (x + 3)^2$ $\quad\quad$ $\bar{f}(x) = \sqrt{x} - 3$

e) $f(x) = \sqrt{\frac{1}{3}x}$ $\quad\quad$ $\bar{f}(x) = 3x^2$

f) $f(x) = x^2 + 8$ $\quad\quad$ $\bar{f}(x) = \sqrt{x - 8}$

Lösungen zur Aufg. 3:

zu d) $D_f = \mathbb{R}$ $\quad\quad$ $D_{\bar{f}} = \mathbb{R}_{\geq 0}$

zu e) $D_f = \mathbb{R}_{\geq 0}$ $\quad\quad$ $D_{\bar{f}} = \mathbb{R}$

zu f) $D_f = \mathbb{R}$ $\quad\quad$ $D_{\bar{f}} = \mathbb{R}_{\geq 8}$