Lösung zu 352:

a) $f(x) = a \cdot b^x$
$f(0) = 1$ → a = 1
$f(1) = 4$ → b = 4

$f(x) = 4^x$

b) $f(0) = 1$ → a = 1
$f(1) = 3$ → b = 3

$f(x) = 3^x$

c) $f(0) = 3$ → a = 3
$f(1) = 7$ → 3b = 7 → $b = \frac{7}{3}$

$f(x) = 3 \cdot \left(\frac{7}{3}\right)^x$

d) $f(0) = -2$ → a = –2
$f(1) = -3$ → –2b = –3 → $b = \frac{3}{2}$

$f(x) = -2 \cdot \left(\frac{3}{2}\right)^x$

e) $f(0) = -2$ → a = –2
$f(1) = -1$ → –2b = –1 → $b = \frac{1}{2}$

$f(x) = -2 \cdot \left(\frac{1}{2}\right)^x$

f) $f(0) = 3$ → a = 3
$f(1) = 1$ → 3b = 1 → $b = \frac{1}{3}$

$f(x) = 3 \cdot \left(\frac{1}{3}\right)^x$