S.83 **331** $f(x) = -3x + 1$

a) $x = 2$ $\quad f(2) = -3 \cdot 2 + 1 = -6 + 1 = -5$

b) $x = 0$ $\quad f(0) = -3 \cdot 0 + 1 = 0 + 1 = 1$

c) $x = -1$ $\quad f(-1) = -3 \cdot (-1) + 1 = 3 + 1 = 4$

d) $x = 1{,}5$ $\quad f(1{,}5) = -3 \cdot 1{,}5 + 1 = -4{,}5 + 1 = -3{,}5$

332 $h(x) = 2x^2 - 4$ $\qquad 1^2 = 1 \cdot 1$

a) $x = 1$ $\quad h(1) = 2 \cdot 1^2 - 4 = 2 \cdot 1 - 4 = 2 - 4 = -2$

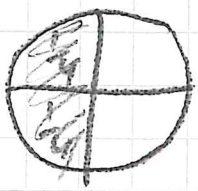
b) $x = 0$ $\quad h(0) = 2 \cdot 0^2 - 4 = 2 \cdot 0 - 4 = 0 - 4 = -4$

c) $x = -3$ $\quad h(-3) = 2 \cdot (-3)^2 - 4 = 2 \cdot 9 - 4 = 18 - 4 = 14$

d) $x = \frac{1}{2}$ $\quad h\left(\frac{1}{2}\right) = 2 \cdot \left(\frac{1}{2}\right)^2 - 4 = 2 \cdot \frac{1}{4} - 4 = \frac{1}{2} - 4 = -\frac{7}{2} = -3\frac{1}{2}$ $(= -3{,}5)$

$\left(\frac{1}{2}\right)^2 = \frac{1}{2} \cdot \frac{1}{2} = \frac{1}{4}$

$\frac{2}{1} \cdot \frac{1}{4} = \frac{2}{4} = \frac{1}{2}$



$\frac{1}{2} - \frac{4}{1}$

$= \frac{1}{2} - \frac{8}{2} = -\frac{7}{2}$

333 $f(x) = 3x + 2$ ×2

a) $f(x) = 2$

$3x + 2 = 2$ |−2

$3x = 0$ |:3

$x = 0$

$f(0) = 3 \cdot 0 + 2 = 2$

b) $f(x) = -4$

$3x + 2 = -4$ |−2

$3x = -6$ |:3

$x = -2$

$-4 - 2 = -6$

$f(-2) = 3 \cdot (-2) + 2 = -6 + 2 = -4$

c) $f(x) = 0$

$3x + 2 = 0$ |−2

$3x = -2$ |:3

$x = -\frac{2}{3}$ $(= -0,666\ldots)$

$f(-\frac{2}{3}) = 3 \cdot (-\frac{2}{3}) + 2$

$= -\frac{6}{3} + 2$

$= -2 + 2 = 0$

d) $f(x) = \frac{1}{2}$

$3x + 2 = \frac{1}{2}$ |−2

$3x = -\frac{3}{2}$ |:3

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

$-\frac{3}{2} : \frac{3}{1}$

$= -\frac{3}{2} \cdot \frac{1}{3} = -\frac{3}{6} = -\frac{1}{2}$

$\frac{1}{2} - \frac{2}{1}$

$= \frac{1}{2} - \frac{4}{2}$

$= -\frac{3}{2}$