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$$g(x) = -2x + 1$$

S. 82

a)  $x = 3$

$$g(3) = -2 \cdot 3 + 1 \\ = -6 + 1 = \underline{-5}$$

b)  $x = 0,5$

$$g(0,5) = -2 \cdot 0,5 + 1 \\ = -1 + 1 = \underline{0}$$

c)  $x = -2$

$$g(-2) = -2 \cdot (-2) + 1 \\ = 4 + 1 = \underline{5}$$

d)  $x = -5$

$$g(-5) = -2 \cdot (-5) + 1 \\ = 10 + 1 = \underline{11}$$

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$$f(x) = 3x + 2$$

a)  $f(x) = 2$

$$3x + 2 = 2 \quad || -2$$

$$\frac{3x}{3} = \frac{0}{3} \quad || :3$$

$$x = 0$$

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

b)  $f(x) = -4$

$$3x + 2 = -4 \quad || -2$$

$$\frac{3x}{3} = \frac{-6}{3} \quad || :3$$

$$x = -2$$

$$c) f(x) = 0$$

$$3x + \overset{0}{2} = \overset{-2}{0} \quad \parallel -2$$

$$\frac{3x}{3} = \frac{-2}{3} \quad \parallel :3$$

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

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

$$3x + \cancel{2} = \frac{1}{2} \quad \parallel -2$$

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

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

$$3x = -\frac{3}{2} \quad \parallel :3$$

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

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

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~~WIKI~~

$$h(t) = t^2 - 5$$

$$a) h(t) = 20$$

$$t^2 - \overset{0}{5} = \overset{25}{20} \quad \parallel +5$$

$$t^2 = 25 \quad \parallel \sqrt{\quad}$$

$$t = \pm \sqrt{25}$$

$$t = \pm 5$$

$$b) h(t) = 4$$

$$t^2 - \overset{0}{5} = \overset{9}{4} \quad \parallel +5$$

$$t^2 = 9$$

$$t = \pm \sqrt{9}$$

$$t = \pm 3$$

$$c) h(t) = -10$$

$$t^2 - \cancel{8} = -10 \quad // +5$$

$$t^2 = -5$$

$$t = \sqrt{-5}$$

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$$d) h(t) = 0$$

$$t^2 - \cancel{8} = 0 \quad // +5$$

$$t^2 = 5$$

$$t = \pm \sqrt{5}$$