

$$13. \quad f(1) = 2(1) + 1 = 3; \quad f(-2) = 2(-2) + 1 = -3; \quad f\left(\frac{1}{2}\right) = 2\left(\frac{1}{2}\right) + 1 = 2;$$

$$f(a) = 2(a) + 1 = 2a + 1; \quad f(-a) = 2(-a) + 1 = -2a + 1;$$

$$f(a + b) = 2(a + b) + 1 = 2a + 2b + 1.$$

$$15. \quad g(2) = \frac{1 - (2)}{1 + (2)} = \frac{-1}{3} = -\frac{1}{3}; \quad g(-2) = \frac{1 - (-2)}{1 + (-2)} = \frac{3}{-1} = -3; \quad g\left(\frac{1}{2}\right) = \frac{1 - \left(\frac{1}{2}\right)}{1 + \left(\frac{1}{2}\right)} = \frac{\frac{1}{2}}{\frac{3}{2}} = \frac{1}{3};$$

$$g(a) = \frac{1 - (a)}{1 + (a)} = \frac{1 - a}{1 + a}; \quad g(a - 1) = \frac{1 - (a - 1)}{1 + (a - 1)} = \frac{1 - a + 1}{1 + a - 1} = \frac{2 - a}{a};$$

$$g(-1) = \frac{1 - (-1)}{1 + (-1)} = \frac{2}{0}, \text{ so } g(-1) \text{ is not defined.}$$

$$17. \quad f(0) = 2(0)^2 + 3(0) - 4 = -4; \quad f(2) = 2(2)^2 + 3(2) - 4 = 8 + 6 - 4 = 10;$$

$$f(-2) = 2(-2)^2 + 3(-2) - 4 = 8 - 6 - 4 = -2;$$

$$f(\sqrt{2}) = 2(\sqrt{2})^2 + 3(\sqrt{2}) - 4 = 4 + 3\sqrt{2} - 4 = 3\sqrt{2};$$

$$f(x + 1) = 2(x + 1)^2 + 3(x + 1) - 4 = 2x^2 + 4x + 2 + 3x + 3 - 4 = 2x^2 + 7x + 1;$$

$$f(-x) = 2(-x)^2 + 3(-x) - 4 = 2x^2 - 3x - 4.$$