

1.4 1)

$$f(x) = 10 \Rightarrow 2x + 6 = 10 \Rightarrow 2x = 10 - 6 \Rightarrow 2x = 4 \Rightarrow \boxed{x = 2}$$

1.4 2)

$$f(x) = -13 \Rightarrow 3x - 7 = -13 \Rightarrow 3x = -13 + 7 \Rightarrow 2x = -6 \Rightarrow \boxed{x = -2}$$

1.4 3)

$$f(x) = 4 \Rightarrow \frac{x+2}{x-1} = 4 \Rightarrow x+2 = 4x-4 \Rightarrow x-4x = -4-2 \Rightarrow -3x = -6 \Rightarrow \boxed{x = 2}$$

1.4 4)

$$f(x) = 1 \Rightarrow \frac{2x-3}{x+4} = 1 \Rightarrow 2x-3 = x+4 \Rightarrow 2x-x = 4+3 \Rightarrow \boxed{x = 7}$$

1.4 5)

$$f(x) = 2 \Rightarrow x^2 + x = 2 \Rightarrow x^2 + x - 2 = 0, \Delta = 1 + 8 = 9$$

$$x_{1,2} = \frac{-1 \pm \sqrt{9}}{2 \cdot 1} = \frac{-1 \pm 3}{2} \Rightarrow \begin{cases} x_1 = \frac{-1+3}{2} = \boxed{1} \\ x_2 = \frac{-1-3}{2} = \boxed{-2} \end{cases}$$

1.4 6)

$$f(x) = -1 \Rightarrow 2x^2 - 2x - 5 = -1 \Rightarrow 2x^2 - 2x - 4 = 0 \Rightarrow x^2 - x - 2 = 0, \Delta = 1 + 8 = 9$$

$$x_{1,2} = \frac{1 \pm \sqrt{9}}{2 \cdot 1} = \frac{1 \pm 3}{2} \Rightarrow \begin{cases} x_1 = \frac{1+3}{2} = \boxed{2} \\ x_2 = \frac{1-3}{2} = \boxed{-1} \end{cases}$$