1.

1   $y = \dfrac{2x - 1}{x - 4}$

2   $y = \sqrt{\dfrac{x + 1}{x - 4}}$

3   $y = (3x - 1)^3$

4   $y = \mathrm{Sin}^{-1}\left(x^2 + 2x - 3\right)$

5   $y = \mathrm{Tan}^{-1}\left(\dfrac{3x}{x + 4}\right)$

6   $y = \sin\left(2x + 1\right)$

7   $y = \tan(x^2 + 3)$

10   $y = \log(3x - 4)$

8   $y = e^{2x^2 - x + 1}$

11   $y = \log_3\left(x^2 - x + 2\right)$

9   $y = 3^{x-1}$

12   $y = x^{\sqrt{x}}$