

有理函數的圖形

1. 以下哪個函數的圖形有鉛直漸近線？

(1) $f(x) = e^{x/2}$

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

(3) $f(x) = \frac{x^2 + 1}{x - 1}$

(4) $f(x) = \frac{x^2 - 1}{x - 1}$

2. 以下哪個函數的圖形有水平漸近線？

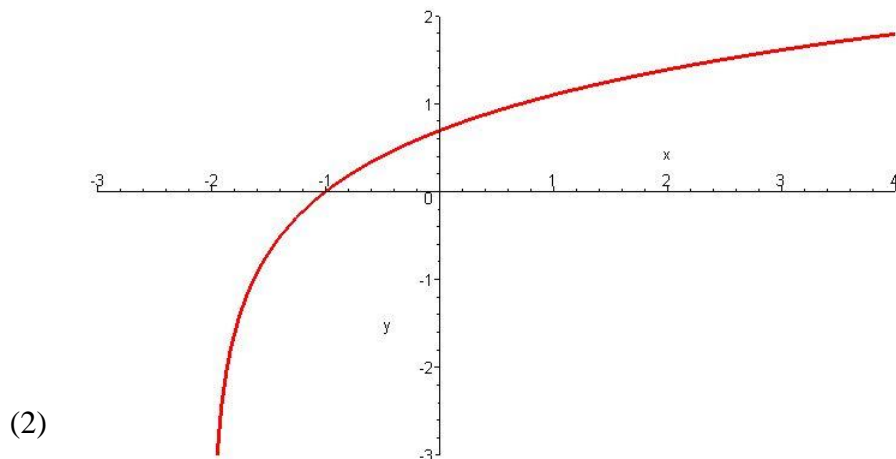
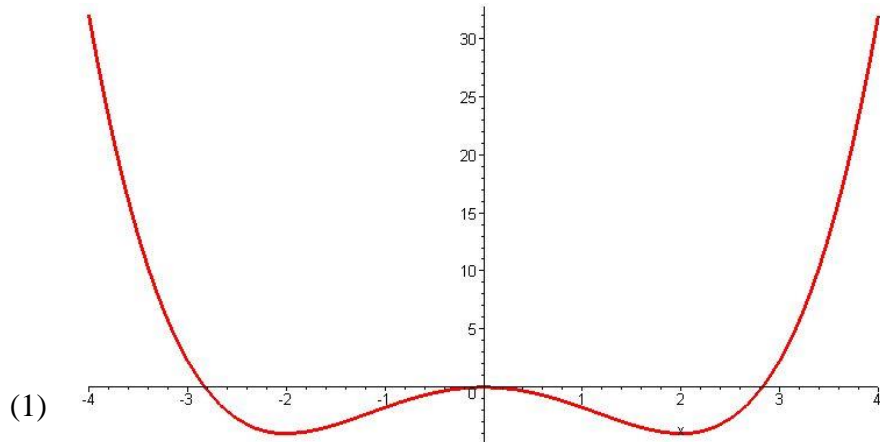
(1) $f(x) = \ln(x - 1)$

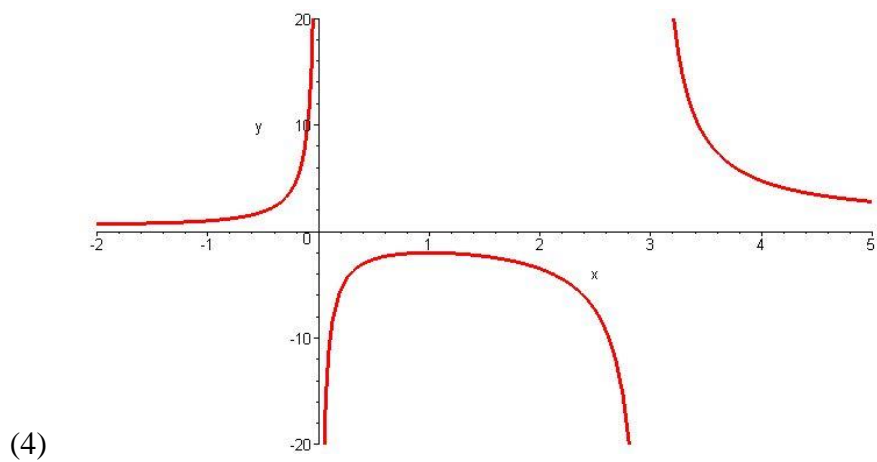
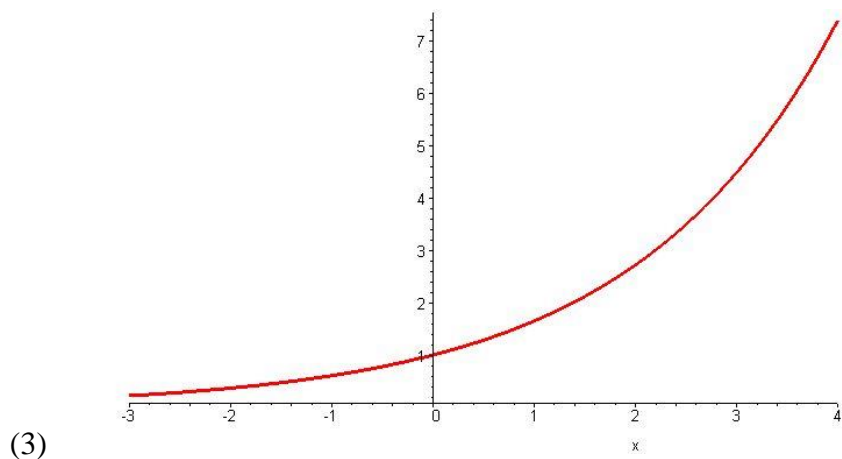
(2) $f(x) = x^3 - x + 1$

(3) $f(x) = \frac{x^2 + 1}{x - 1}$

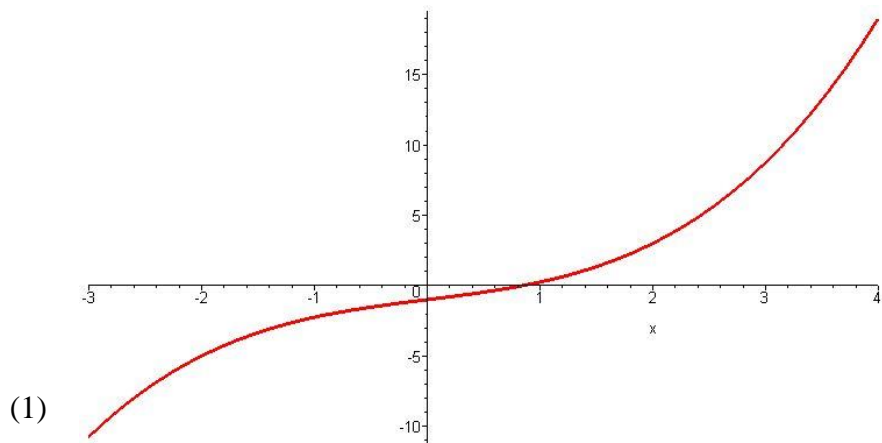
(4) $f(x) = \frac{x^2 + 1}{x^2 - 1}$

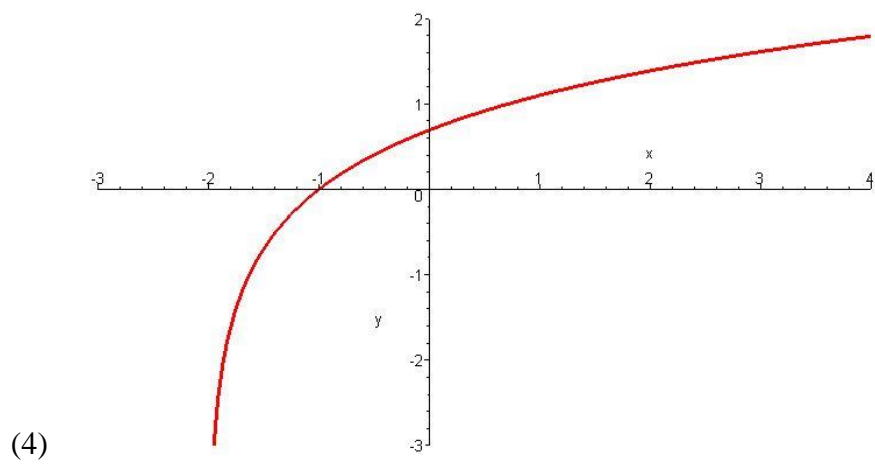
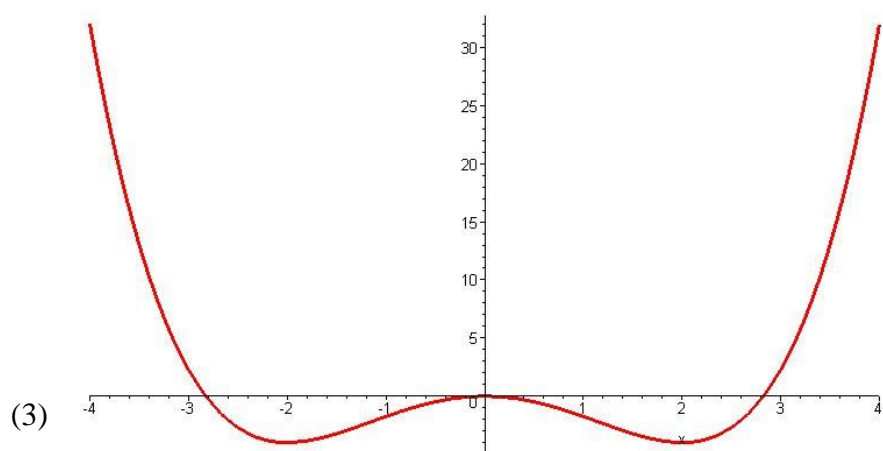
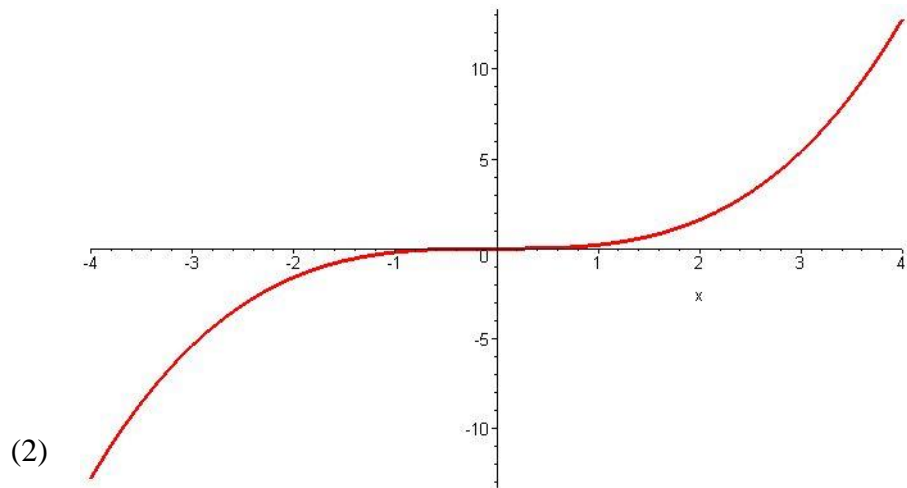
3. 以下哪幅圖片可能是一個多項式函數的圖形？





4. 以下哪幅圖片不可能是一個多項式函數的圖形？





5. 以下哪幅圖片可能是一個有理函數的圖形？

