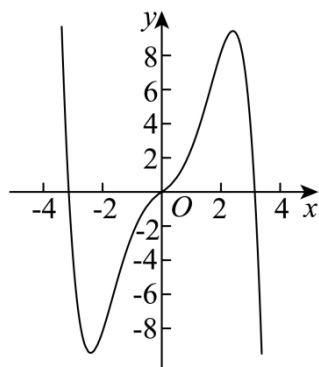


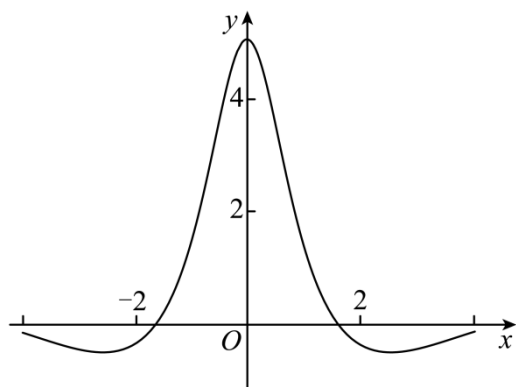
函数图像刷题练

一、单选题

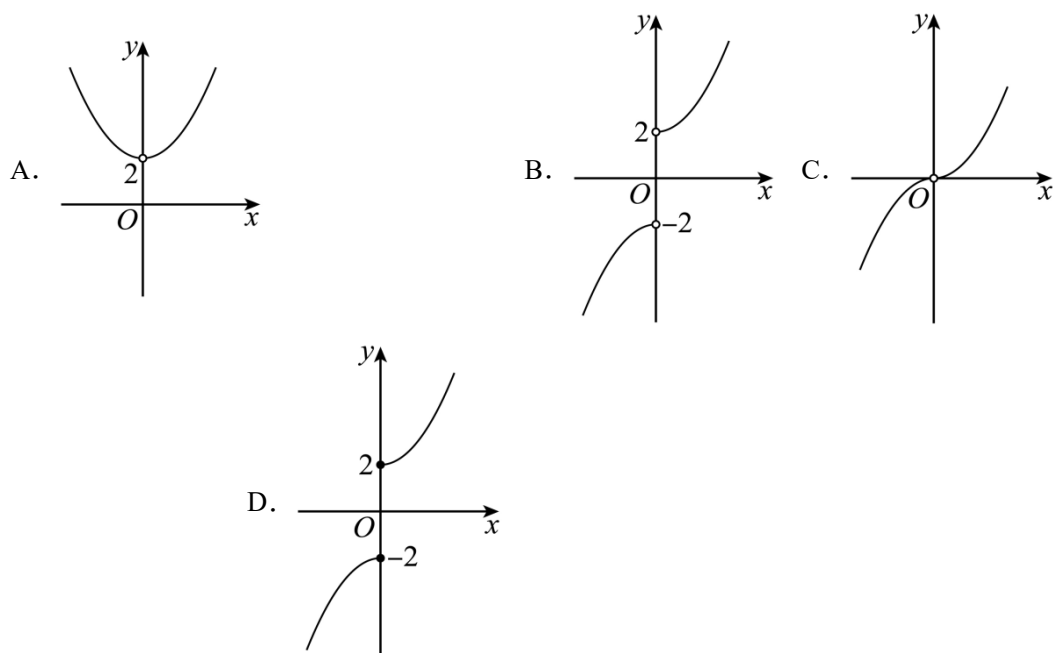
1. 已知函数 $f(x)=3^{|x|}$, $g(x)=\sin x$, 某函数的部分图象如图所示, 则该函数可能是 ()



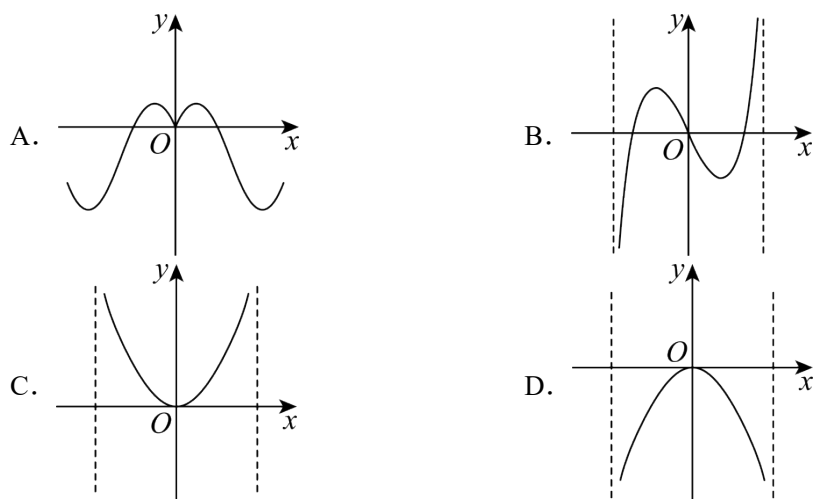
- A. $y=f(x)+g(x)$ B. $y=f(x)-g(x)$
- C. $y=f(x)g(x)$ D. $y=\frac{g(x)}{f(x)}$
2. 已知函数 $f(x)$ 的部分图象如下图所示, 则 $f(x)$ 的解析式可能为 ()



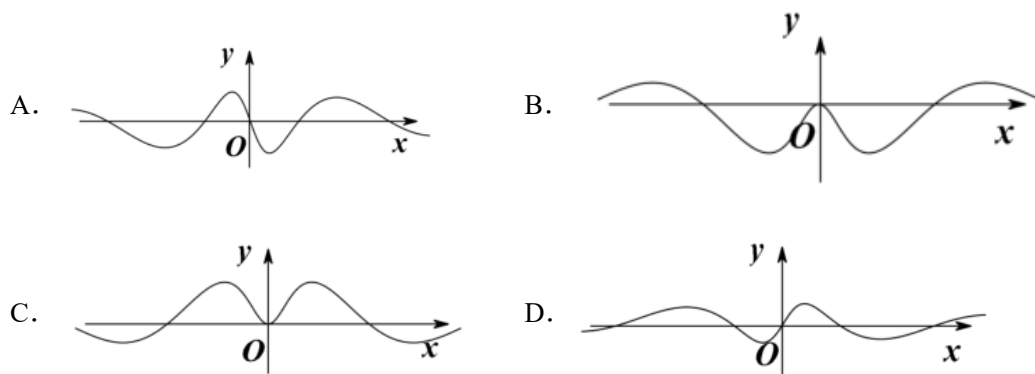
- A. $\frac{5e^x - 5e^{-x}}{x^2 + 2}$ B. $\frac{5\sin x}{x^2 + 1}$
- C. $\frac{5e^x + 5e^{-x}}{x^2 + 2}$ D. $\frac{5\cos x}{x^2 + 1}$
3. 函数 $f(x)=(2^x+2^{-x})\frac{|x|}{x}$ 的大致图象是 ()



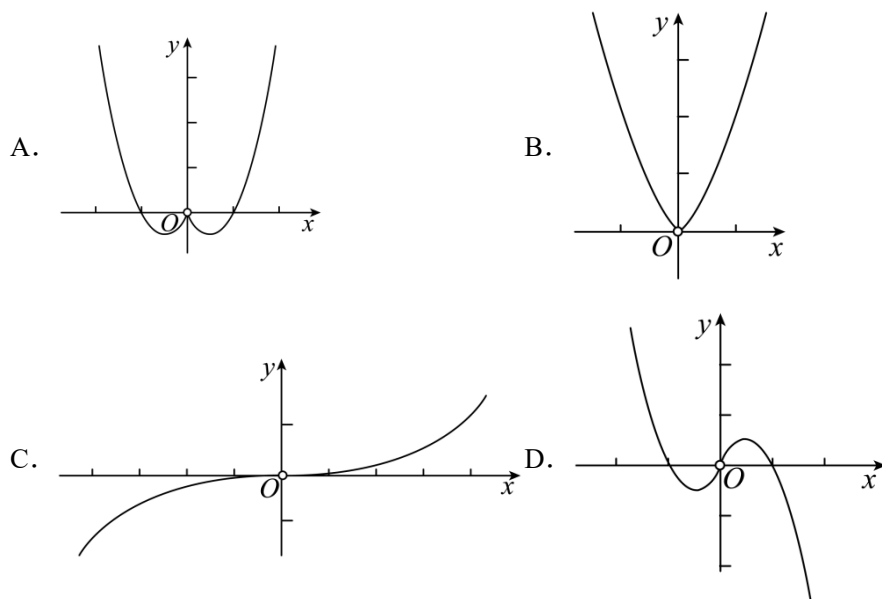
4. 函数 $f(x) = \sin x \cdot \ln \frac{2+x}{2-x}$ 的大致图象是 ()



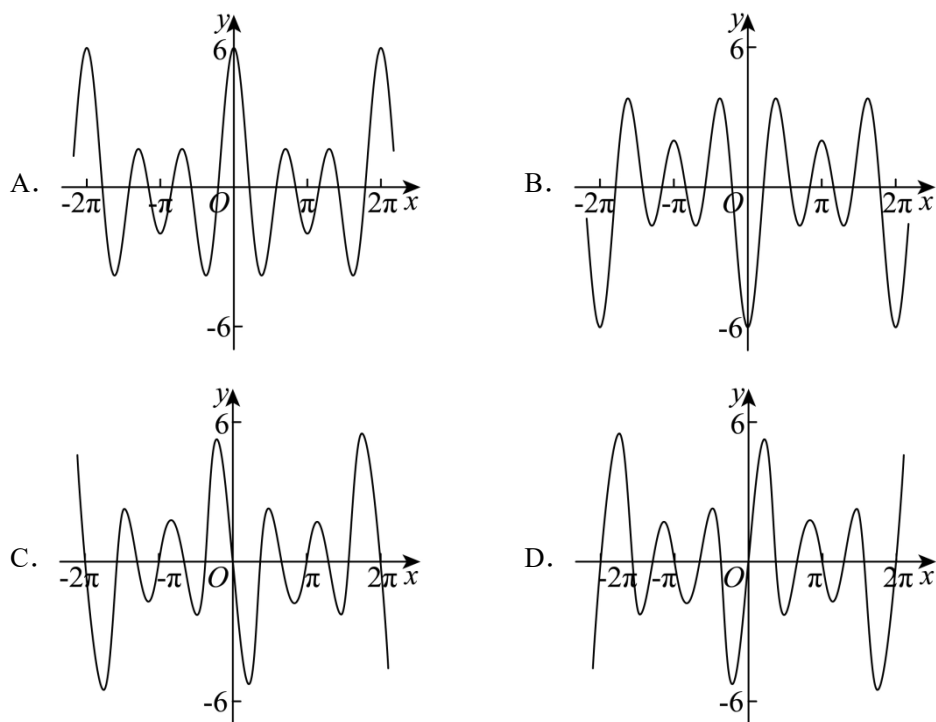
5. 已知函数 $f(x) = \frac{x}{1+x^2} \cdot \sin x$, 则函数 $y = f(x)$ 的图象大致为 ()



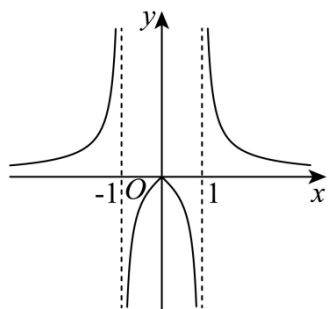
6. 函数 $f(x) = (x^2 + |x|) \cdot \ln |x|$ 的图象大致是 ()



7. 函数 $f(x) = \cos x + 2\cos 2x + 3\cos 3x$ 的大致图象可能是 ()

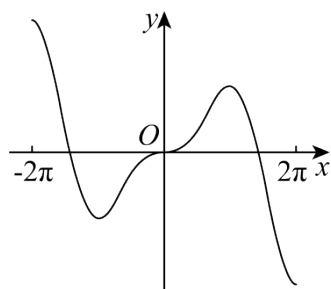


8. 已知函数 $y = f(x)$ 的图象如下, 则 $f(x)$ 的解析式可能为 ()



A. $f(x) = \frac{x}{1-|x|}$ B. $f(x) = \frac{x}{|x|-1}$ C. $f(x) = \frac{|x|}{1-x^2}$ D. $f(x) = \frac{|x|}{x^2-1}$

9. 已知函数 $y = f(x)$ 的部分图象如图所示，则此函数的解析式可能是 ()



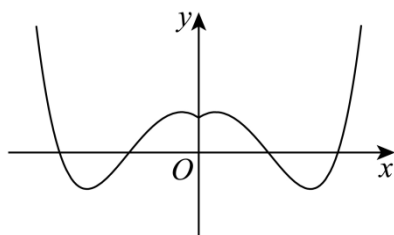
A. $y = \ln(\sqrt{x^2+1}-x)$

B. $y = \frac{1-\cos x}{e^x - e^{-x}}$

C. $y = \sin x - x \cos x$

D. $y = \sin x - x e^x$

10. 已知函数 $f(x)$ 的图象如图所示，则该图象所对应的函数可能是 ()



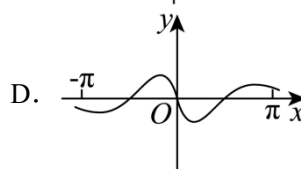
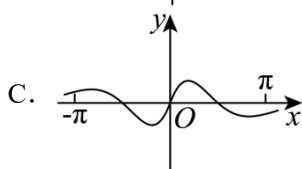
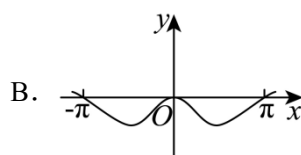
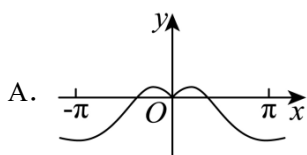
A. $f(x) = \frac{x}{2^{|x|}}$

B. $f(x) = 2^{|x|} - 2$

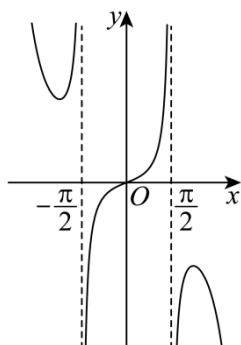
C. $f(x) = 2^{|x|} - x^2$

D. $f(x) = e^{|x|} - |x|$

11. 函数 $f(x) = \frac{x \cos x}{e^{|x|-1}}$ 的图象大致为 ()



12. 函数 $f(x)$ 的部分图象如图所示，则 $f(x)$ 的解析式可能为 ()



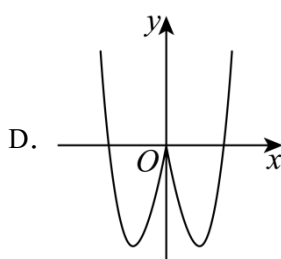
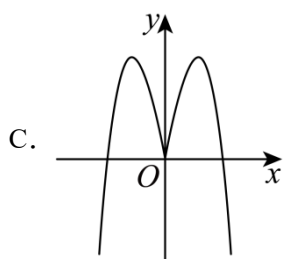
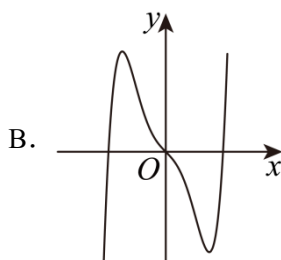
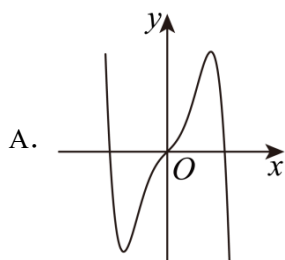
A. $f(x) = \frac{e^x - e^{-x}}{\cos x}$

B. $f(x) = \frac{e^x + e^{-x}}{\cos x}$

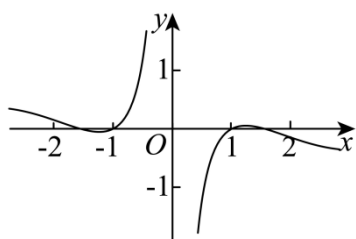
C. $f(x) = \frac{e^x - e^{-x}}{\sin x}$

D. $f(x) = \frac{e^x + e^{-x}}{\sin x}$

13. 函数 $f(x) = -x + (e^x + e^{-x})\sin x$ 在区间 $[-3.2, 3.2]$ 的图象大致为 ()



14. 已知函数 $f(x)$ 的部分图象如图所示, 则 $f(x)$ 的解析式可能为 ()



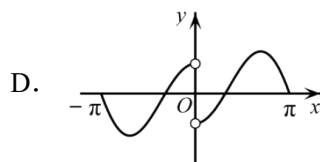
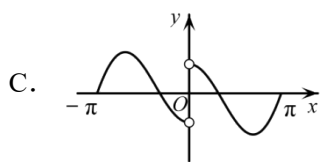
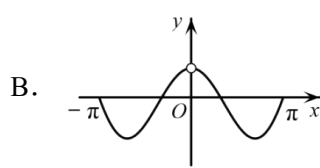
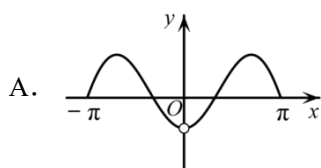
A. $f(x) = \frac{\ln|x| \cdot \sin\left(\frac{\pi}{2} - \frac{x}{2}\right)}{x}$

B. $f(x) = \frac{\ln|x| \cdot \sin\left(\frac{\pi}{2} - x\right)}{x}$

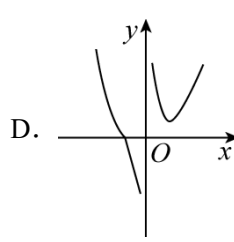
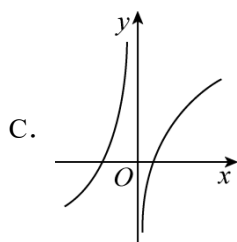
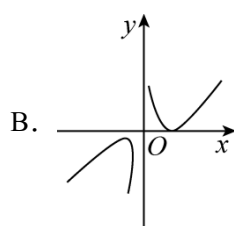
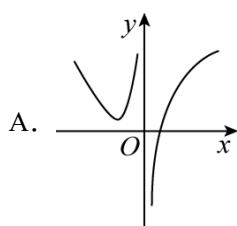
C. $f(x) = \frac{\ln|x| \cdot \sin\left(\frac{\pi}{2} - x\right)}{x^2}$

D. $f(x) = \frac{\ln|x| \cdot \sin x}{x}$

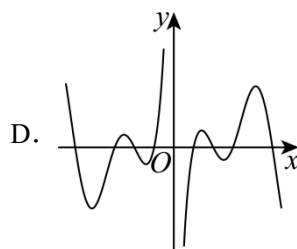
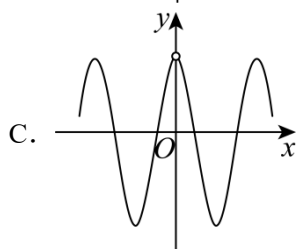
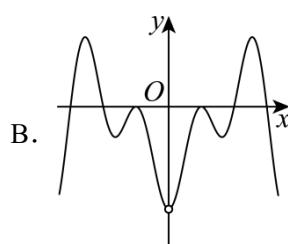
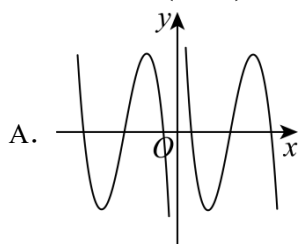
15. 函数 $f(x) = \left(x - \frac{1}{x}\right)\sin|x|$ ($-\pi \leq x \leq \pi, x \neq 0$) 的图象可能为 ()



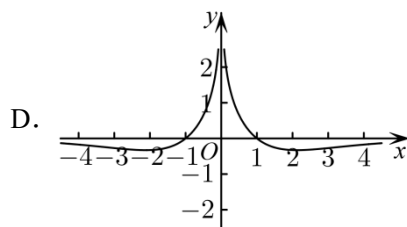
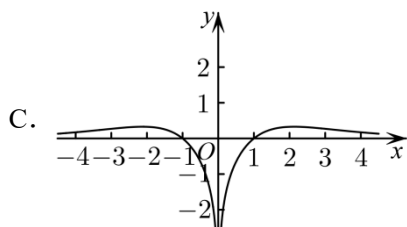
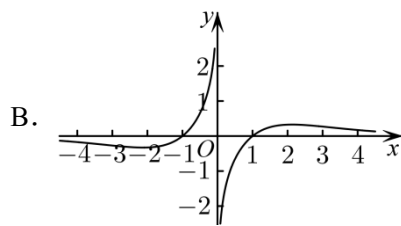
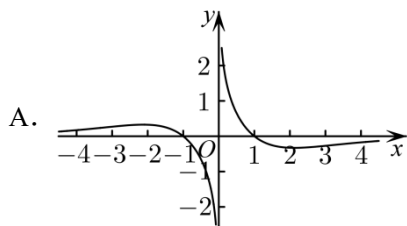
16. 已知函数 $f(x) = x^2 - \frac{\ln|x|}{x}$, 则函数 $f(x)$ 的图像为 ()



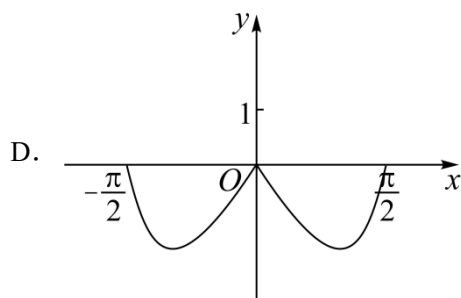
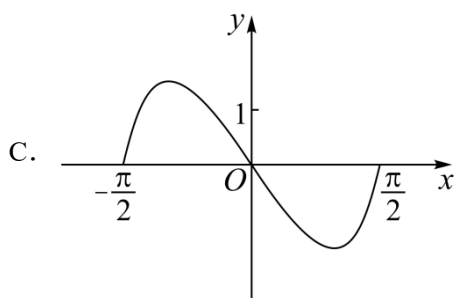
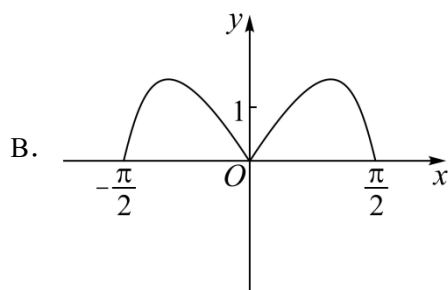
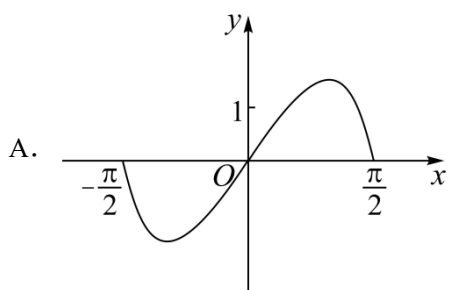
17. 函数 $f(x) = \left(x - \frac{4}{x}\right) \cos \frac{\pi}{2}x$ 的部分图象大致为 ().



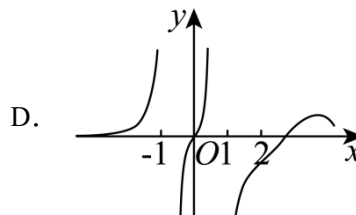
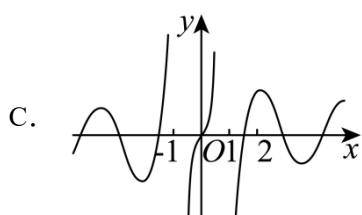
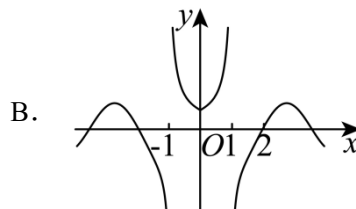
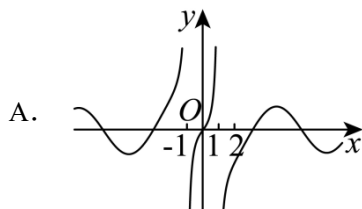
18. 函数 $f(x) = \frac{2 \ln|x|}{2^x + 2^{-x}}$ 的图象大致为 ()



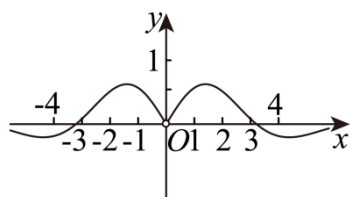
19. 函数 $y = (3^x - 3^{-x}) \cos x$ 在区间 $\left[-\frac{\pi}{2}, \frac{\pi}{2}\right]$ 的图象大致为 ()



20. 函数 $f(x) = \frac{(1+x^2)\sin x}{1-x^2}$ 的部分图象大致是 ()



21. 如图所示, 图象对应的函数解析式为 ()



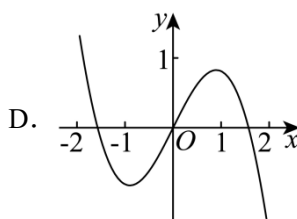
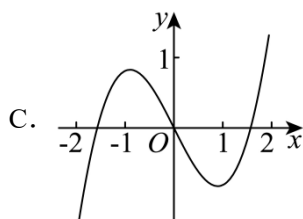
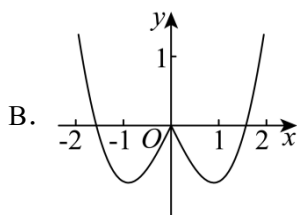
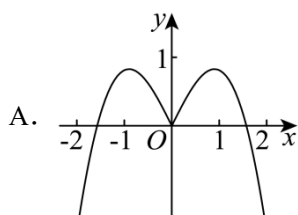
A. $f(x) = \frac{|x| \cos x}{2^x - 2^{-x}}$

B. $f(x) = \frac{|x| \cos x}{2^x + 2^{-x}}$

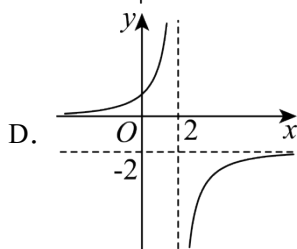
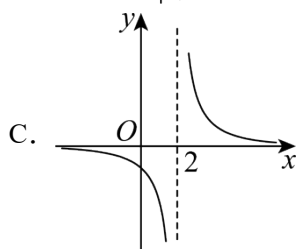
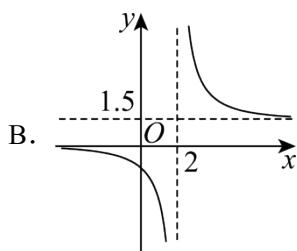
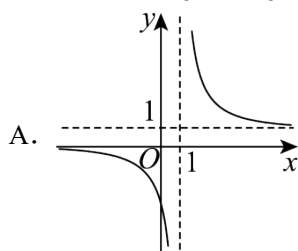
C. $f(x) = \frac{|x| \sin x}{2^x + 2^{-x}}$

D. $f(x) = \frac{|x| \sin x}{2^x - 2^{-x}}$

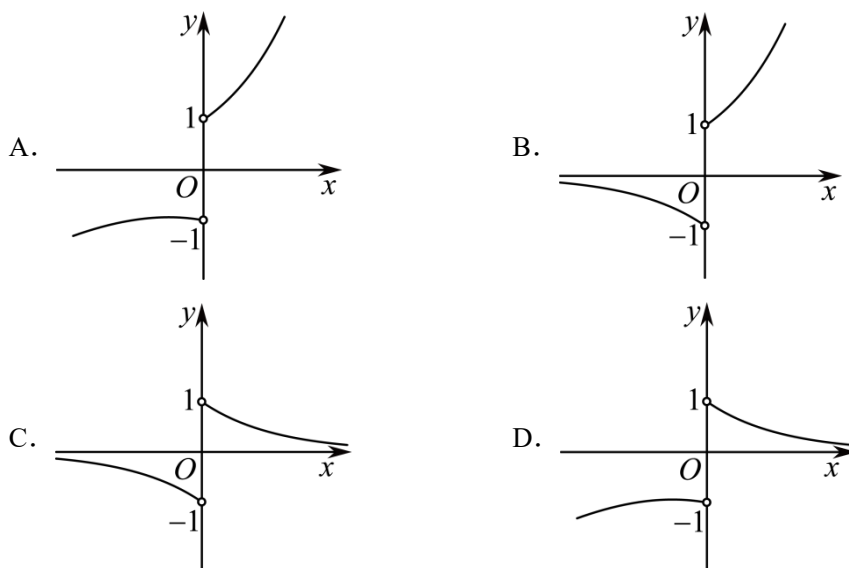
22. 函数 $f(x) = (2^{-x} - 2^x) \cos x$ 的图象大致为 ()



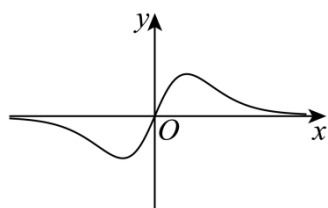
23. 函数 $f(x) = \frac{1.5^x}{1.5^{x-1} - 1.5}$ 的图象大致为 ()



24. 函数 $f(x) = \frac{x}{|x|} \cdot 2x$ 的图象大致形状是 ()



25. 已知函数 $y = f(x)$ 的图象如图所示, 则 $f(x)$ 的解析式可能是 ()



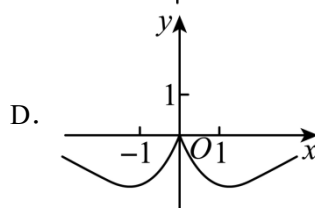
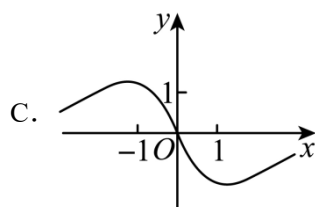
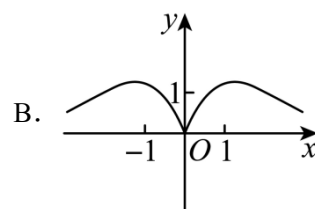
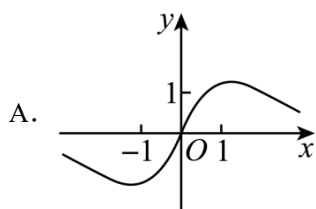
A. $f(x) = \frac{-x - \sin x}{e^x + e^{-x}}$

B. $f(x) = \frac{x - \cos x}{e^x + e^{-x}}$

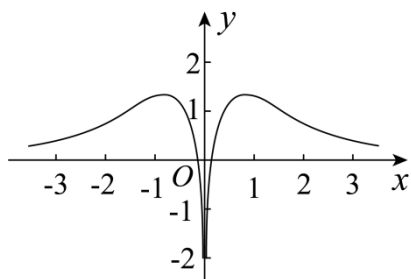
C. $f(x) = \frac{x + \sin x}{e^x + e^{-x}}$

D. $f(x) = \frac{x + \cos x}{e^x + e^{-x}}$

26. 函数 $y = \frac{4x}{e^x + e^{-x}}$ 的图象大致是 ()



27. 已知函数 $f(x)$ 的部分图象如图所示, 则 $f(x)$ 的解析式可能为 ()



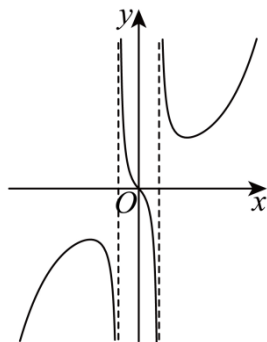
A. $f(x) = \frac{4 + \ln|x|}{1 + \frac{1}{2}\cos x}$

B. $f(x) = \frac{x^2 \cos x}{e^{|x|}}$

C. $f(x) = \frac{\cos x \cdot \ln|x|}{2 + \sin x}$

D. $f(x) = \frac{2 + \ln|x|}{x^2 + \cos x}$

28. 已知函数 $f(x)$ 的部分图象如图所示, 则 $f(x)$ 的解析式可能为 ()



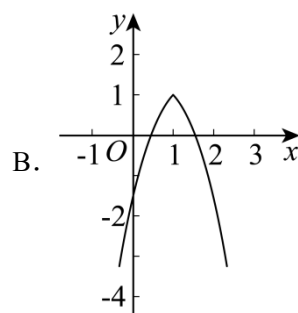
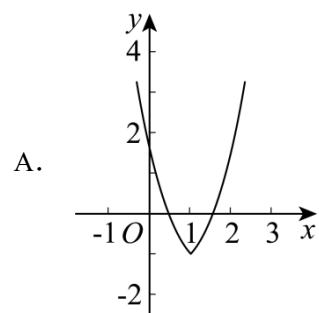
A. $f(x) = \frac{e^x - e^{-x}}{3 - 4|x|}$

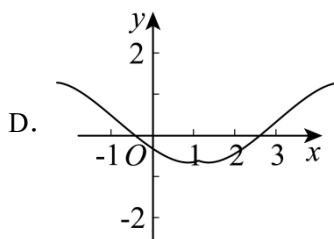
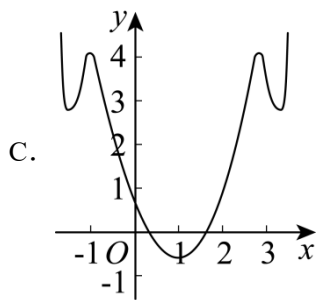
B. $f(x) = \frac{e^x - e^{-x}}{4|x| - 3}$

C. $f(x) = \frac{e^x + e^{-x}}{4|x| - 8}$

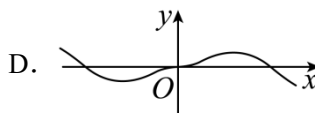
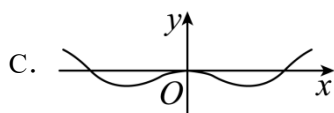
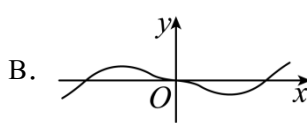
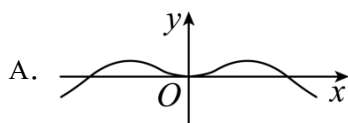
D. $f(x) = \frac{x}{|x| - 1}$

29. 函数 $f(x) = e^{|x-1|} - 2\cos(x-1)$ 的部分图象可能是 ()

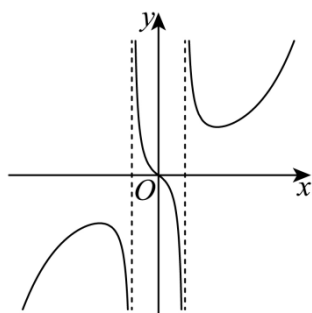




30. 函数 $f(x) = \left(\frac{1-e^x}{1+e^x} \right) \cos\left(\frac{\pi}{2} - x\right)$ 的部分图象大致形状是 ()



31. 已知函数 $f(x)$ 的部分图像如图所示, 则 $f(x)$ 的解析式可能为 ()



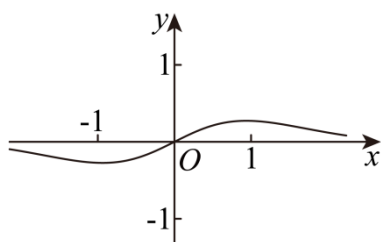
A. $f(x) = \frac{e^x - e^{-x}}{4|x| - 3}$

B. $f(x) = \frac{e^x - e^{-x}}{3 - 4|x|}$

C. $f(x) = \frac{e^x + e^{-x}}{4|x| - 3}$

D. $f(x) = \frac{x}{|x| - 1}$

32. 已知函数 $y = f(x)$ 的部分图象如下:



则 $f(x)$ 的解析式可能为 ().

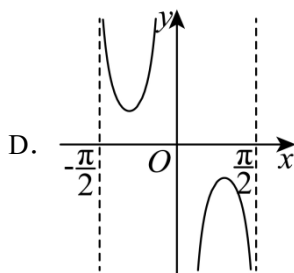
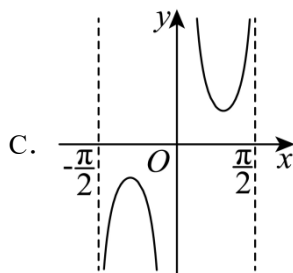
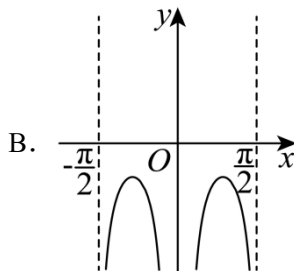
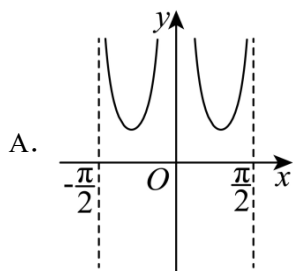
A. $f(x) = \sin x + e^x + e^{-x} - 2$

B. $f(x) = \sin x - e^x - e^{-x} + 2$

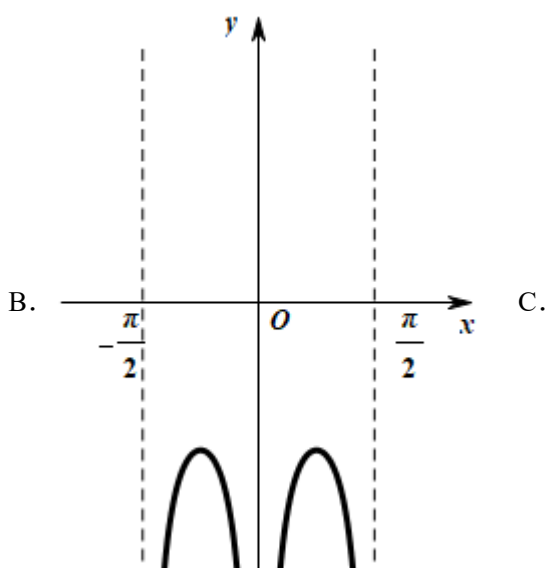
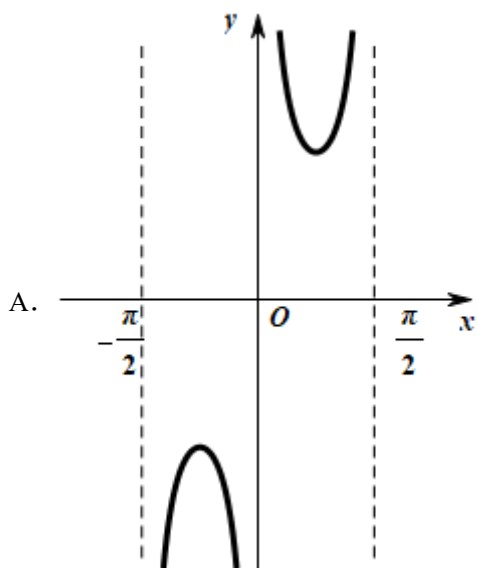
C. $f(x) = \sin x \cdot (e^x + e^{-x})$

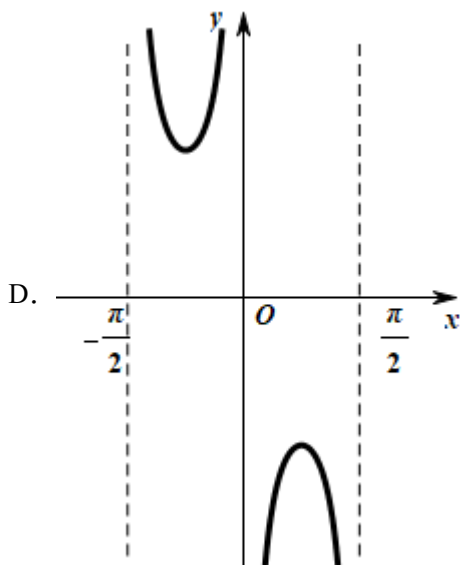
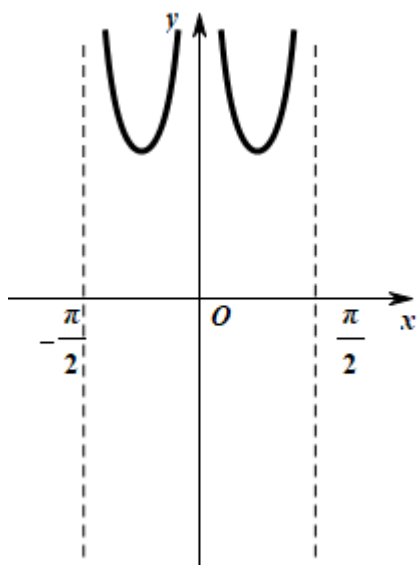
D. $f(x) = \frac{\sin x}{e^x + e^{-x}}$

33. 函数 $f(x) = \tan x + \frac{1}{\tan x}$, 则 $y = f(x)$ 的部分图象大致是 ()

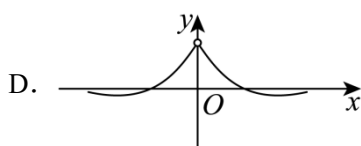
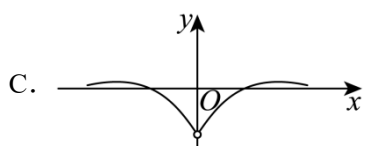
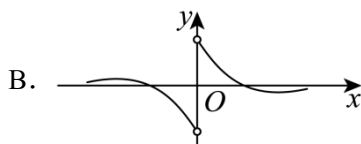
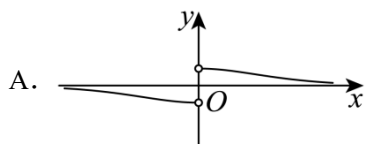


34. 函数 $f(x) = \tan x + \frac{1}{\tan x}, x \in \{x | -\frac{\pi}{2} < x < 0 \text{ 或 } 0 < x < \frac{\pi}{2}\}$ 的图像为 ()

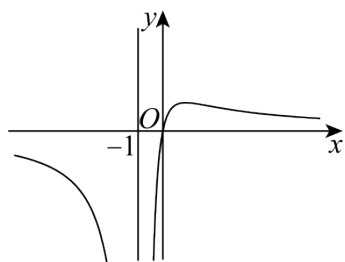




35. 函数 $f(x) = \frac{|x|}{2^x - 2^{-x}}$ 的图象大致为 ()



36. 如图是下列四个函数中某一个的部分图象, 则该函数为 ()



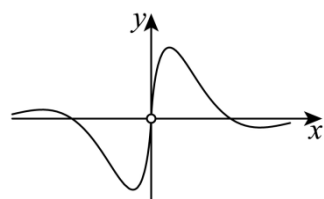
A. $f(x) = \frac{x}{\ln|x+2|}$

B. $f(x) = \frac{x+1}{e^{x+1}-1}$

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

D. $f(x) = \frac{x}{(x+1)^2}$

37. 已知函数 $f(x)$ 的图象如图所示, 则函数 $f(x)$ 的解析式可能为 ()



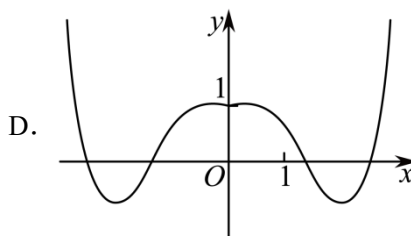
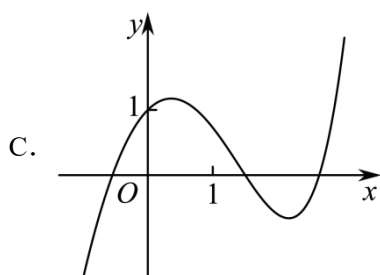
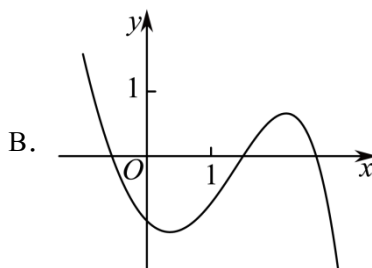
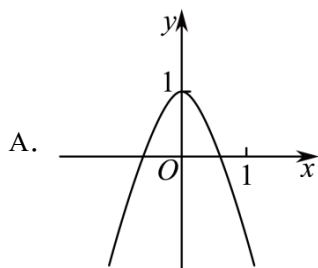
A. $f(x) = \frac{e^x - e^{-x}}{x}$

B. $f(x) = \sin 2x \cdot \ln \frac{x^2 + 1}{x^2}$

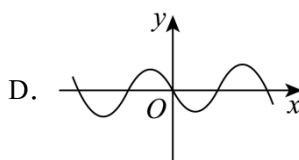
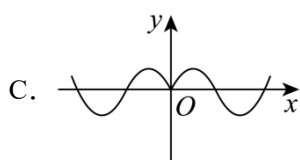
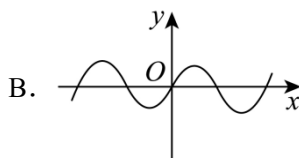
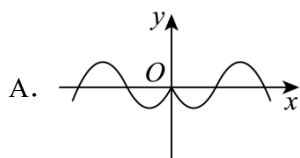
C. $f(x) = \frac{e^x + e^{-x}}{x}$

D. $f(x) = \cos 2x \cdot \ln \frac{x^2 + 1}{x^2}$

38. 函数 $f(x) = e^x - 2x^2$ 的图象大致为 ()



39. 函数 $f(x) = \frac{2^x - 1}{2^x + 1} \cdot \sin x$ 的部分图象大致是 ()



40. 函数 $f(x) = \frac{3x^2 - 1}{x^3}$ 的大致图象为 ()

