

Trigonometria

1. $2 \sin(-x) + \cos(\pi - x) + \cos\left(\frac{\pi}{2} - x\right)$
2. $-\cos(-x) + (\pi - x) + \sin\left(\frac{\pi}{2} - x\right) + \sin\left(\frac{\pi}{2} - x\right)$
3. $2 \cos\left(-x + \frac{3\pi}{2}\right) - (-x) + \sin(3\pi - x) + \cos\left(-\frac{\pi}{2} - x\right)$
4. $\sin(x + \pi) + \cos(x - \pi) + \sin\left(\frac{9\pi}{2} + x\right)$
5. $\sin(-x) + \cos(\pi + x) - \sin\left(\frac{\pi}{2} + x\right)$
6. $-\sin(-x) + \cos(\pi - x) - \cos\left(\frac{\pi}{2} - x\right)$
7. $(-x) + (\pi + x) - \left(\frac{\pi}{2} - x\right)$
8. $\cos\left(-x + \frac{\pi}{2}\right) + \sin(\pi - x) - \sin\left(\frac{3\pi}{2} + x\right)$
9. $2 \sin(\pi - x) - \cos(-x) + \sin\left(\frac{5\pi}{2} - x\right)$
10. $\cos(2\pi - x) - \sin(-x) + \left(\frac{3\pi}{2} - x\right)$
11. $\sin\left(x - \frac{3\pi}{2}\right) + \cos\left(x + \frac{\pi}{2}\right) - \sin(-x)$
12. $-(\pi - x) + \cos\left(\frac{5\pi}{2} + x\right) + \sin(-x)$
13. $\sin\left(-x + \frac{\pi}{2}\right) + \cos(3\pi - x) - \cos\left(\frac{\pi}{2} - x\right)$
14. $2(\pi + x) - \sin\left(-x + \frac{\pi}{2}\right) + \cos(2\pi + x)$
15. $\cos\left(-x + \frac{5\pi}{2}\right) - \sin(\pi + x) + (-x)$
16. $\sin(3\pi + x) + \cos(-x) - \sin\left(\frac{7\pi}{2} - x\right)$
17. $-\sin\left(\frac{\pi}{2} + x\right) + \cos(\pi - x) + \left(\frac{5\pi}{2} - x\right)$
18. $\cos(4\pi - x) + \sin\left(-x - \frac{\pi}{2}\right) - \cos(\pi + x)$
19. $\left(-x + \frac{3\pi}{2}\right) + \sin(2\pi + x) - \cos\left(\frac{3\pi}{2} - x\right)$
20. $\sin(-x + 3\pi) - \cos\left(\frac{5\pi}{2} + x\right) + (\pi - x)$
21. $2 \cos(\pi + x) - \sin(-x) + \sin\left(\frac{11\pi}{2} - x\right)$
22. $\sin\left(\frac{7\pi}{2} + x\right) + \cos(-x) - \left(\frac{\pi}{2} - x\right)$
23. $-\cos\left(\frac{3\pi}{2} - x\right) + \sin(5\pi - x) + \cos(-x)$
24. $(2\pi - x) - \sin\left(\frac{9\pi}{2} + x\right) + \cos(\pi - x)$
25. $\sin(-x - \pi) + \cos\left(\frac{3\pi}{2} + x\right) - (-x)$
26. $\cos\left(\frac{13\pi}{2} - x\right) - \sin(\pi + x) + \cos(-x)$
27. $\sin(6\pi + x) - \cos\left(\frac{7\pi}{2} - x\right) + (\pi - x)$
28. $2 \sin\left(\frac{\pi}{2} - x\right) - \cos\left(\frac{5\pi}{2} + x\right) + \sin(-x)$
29. $\left(-x - \frac{3\pi}{2}\right) + \cos(3\pi + x) - \sin\left(\frac{\pi}{2} - x\right)$

30. $\cos(-x + 7\pi) - \sin(\frac{9\pi}{2} - x) + (-x)$
31. $\sin(\frac{15\pi}{2} + x) + \cos(\pi - x) - \sin(-x)$
32. $-(\frac{11\pi}{2} - x) + \sin(4\pi + x) + \cos(-x)$
33. $\cos(\frac{\pi}{2} + x) - \sin(3\pi - x) + (\frac{5\pi}{2} + x)$
34. $\sin(-x + \frac{9\pi}{2}) + \cos(2\pi - x) - \sin(\frac{\pi}{2} + x)$
35. $2(\frac{3\pi}{2} + x) - \cos(-x) + \sin(5\pi - x)$
36. $\cos(8\pi - x) - \sin(\frac{13\pi}{2} + x) + (-x)$
37. $\sin(-x - \frac{5\pi}{2}) + \cos(7\pi - x) - \sin(\frac{3\pi}{2} - x)$
38. $(\frac{17\pi}{2} - x) + \sin(6\pi + x) - \cos(-x)$
39. $\cos(-x + \frac{21\pi}{2}) - (\pi - x) + \sin(\frac{7\pi}{2} + x)$
40. $\sin(9\pi + x) - \cos(\frac{11\pi}{2} - x) + (-x)$
41. $-\sin(\frac{5\pi}{2} + x) + \cos(4\pi - x) - \sin(-x)$
42. $(-x + \frac{9\pi}{2}) + \sin(7\pi - x) - \cos(\frac{9\pi}{2} + x)$
43. $\cos(\frac{25\pi}{2} - x) + \sin(-x) - (\frac{13\pi}{2} + x)$
44. $\sin(-x + 11\pi) - \cos(\frac{15\pi}{2} - x) + (\pi - x)$
45. $2\cos(\frac{3\pi}{2} - x) + \sin(\frac{17\pi}{2} + x) - \cos(-x)$
46. $(-x - \frac{7\pi}{2}) + \sin(8\pi + x) - \cos(\frac{11\pi}{2} - x)$
47. $\sin(\frac{19\pi}{2} + x) - \cos(\pi - x) + (-x)$

Nota: para cada expressão, aplica as identidades de redução de ângulos (simetria nas funções trigonométricas e periodicidade) para reescrever cada termo com argumento no primeiro quadrante, indicando eventualmente o sinal resultante.