**QUICK ANTIDIFFERENTIATING.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***1. x ½***  |  |  | ***16.***  ***e4x –*** |  |
| ***2. x¾*** |  | ***17. x7 + x2 + x*** ***x3*** |  |
| ***3. x – 6***  |  | ***18. x e*** |  |
| ***4. 6*** ***x2*** |  | ***19. 1 .*** ***(x + 2)*** |  |
| ***5. 8*** ***x*** |  | ***20. 3 .*** ***(x – 1)*** |  |
| ***6. e7x*** |  | ***21. 1 .*** ***(4x + 1)*** |  |
| ***7. e – x***  |  | ***22. 12 .*** ***(3x + 5)*** |  |
| ***8.*** √***(e x)***  |  | ***23.***  ***cosec2(5x)*** |  |
| ***9. e*** |  | ***24. eπx*** |  |
| ***10. sin(9x)***  |  | ***25.*** |  |
| ***11. cos(3x)***  |  | ***26.******sin(3x) – cos(5x)*** |  |
| ***12. sec2(5x)*** |  | ***27.***  |  |
| ***13. sec(2x)tan(2x)***  |  | ***28.***  |  |
| ***14.*** ***cosec(9x)cot(9x)*** |  | ***29. xπ*** |  |
| ***15. x – sin(6x)***  |  | ***30.***  |  |

**QUICK ANTIDIFFERENTIATING.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***1. x ½***  | ***2 x3/2******3*** |  | ***16.***  ***e4x –*** | ***e4x –3sin(x/3)******4*** |
| ***2. x¾*** | ***4x7/4******7*** | ***17. x7 + x2 + x*** ***x3******=x4 + 1/x + x- 2***  | ***x5 + lnx – x-1******5*** |
| ***3. x – 6***  | ***x – 5*** ***-5*** | ***18. x e*** | ***xe+1******x+1*** |
| ***4. 6 = 6 x – 2***  ***x2*** |  ***-6x – 1***  | ***19. 1 .*** ***(x + 2)*** | ***ln(x+2)*** |
| ***5. 8*** ***x*** | ***8 ln(x)*** | ***20. 3 .*** ***(x – 1)*** | ***3 ln(x – 1)*** |
| ***6. e7x*** | ***e7x******7*** | ***21. 1 .*** ***(4x + 1)*** |  ***ln(4x + 1)*** ***4*** |
| ***7. e – x***  | ***-e – x or e – x***  ***-1*** | ***22. 12 .*** ***(3x + 5)*** | ***12 ln(3x + 5)******3*** |
| ***8.*** √***(e x)= ex/2***  | ***2ex/2*** | ***23.***  ***cosec2(5x)*** | ***- cot(5x)*** ***5*** |
| ***9. e*** | ***ex*** | ***24. eπx*** | ***eπx******π*** |
| ***10. sin(9x)***  | ***- cos(9x)*** ***9*** | ***25.*** | ***4ex/4*** |
| ***11. cos(3x)***  |  ***sin(3x)***  ***3*** | ***26.******sin(3x) – cos(5x)*** | ***-cos3x – sin5x*** ***3 5*** |
| ***12. sec2(5x)*** | ***tan(5x)*** ***5*** | ***27.***  | ***-3cos(x+4)*** ***3*** |
| ***13. sec(2x)tan(2x)***  |  ***sec(2x)*** ***2*** | ***28.***  | ***2sin(x/2 + ½)*** |
| ***14.*** ***cosec(9x)cot(9x)*** | ***- cosec(9x)*** ***9*** | ***29. xπ*** |  ***xπ+1******π+1*** |
| ***15. x – sin(6x)***  | ***x2 + cos(6x)******2 6*** | ***30.*** ***= (x + 4)- 3***  | ***(x + 4) – 2***  ***-2*** |