**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*** |