|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| ***Function*** | ***Degree of******Numerator*** | ***Degree of******Denominator*** | ***Horizontal******Asymptote(s)*** | ***Vertical******Asymptote(s)*** | ***Domain*** | ***Range*** |
| **1.** |  |  |  |  |  |  |
| **2.**  |  |  |  |  |  |  |
| **3.**  |  |  |  |  |  |  |
| **5.**  |  |  |  |  |  |  |

**Complete the table.**

**Simplify.**

**6.  7.  8. **

**Multiply/Divide**

**9.** $\frac{5\left(y-4\right)}{3\left(y+5\right)}\*\frac{7\left(y+5\right)}{10\left(y+4\right)}$ **11.  12.** $\frac{\left(x-5\right)\left(x+2\right)}{\left(2x-1\right)\left(x-5\right)}÷\frac{\left(x-3\right)\left(x-2\right)}{\left(2x-1\right)\left(x-3\right)}$

**13.  15. **

**Add/Subtract.**

**17.  19.  20. **

**21.  22. **

**Solve each equation and check your answers**

**25.  26. **

**27.  28. **

**ANSWERS**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 0 | 2 |  |  |  |  |
| 1 | 1 |  |  |  |  |
| 2 | 1 | None |  |  |  |
| 2 | 2 |  |  |  |  |

1. ****
2. ****
3. ****
4. ****
5. ****
6. ****
7. ****
8. ****
9. ****
10. ****
11. ****
12. ****
13. ****
14. ****
15. ****
16. 41
17. 
18. 6
19. 