**Unit 7 Review - Rationals** NAME \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Simplify Rational Expressions**

*Simplify. State any restrictions on the variable.*

1. 2. 3.

**Multiply/Divide Rational Expressions**

*Simplify. Remember to keep, change, flip when dividing.*

4. 5.

6. 7.

**Add/Subtract Rational Expressions**

*Simplify. Remember to get a common denominator first.*

8. 9.

10. 11.

**Solve Rational Equations**

*Solve. Remember to check for extraneous solutions.*

12. 13. 14.

**Graphs of Rational Functions**

*Identify holes, vertical asymptotes, horizontal asymptotes, and domain of the rational functions. Then graph the function.*

15. 16. 17.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Hole: |  |  | Hole: |  |  | Hole: |  |
| VA: |  | VA: |  | VA: |  |
| HA: |  | HA: |  | HA: |  |
| Domain: |  | Domain: |  | Domain: |  |

