

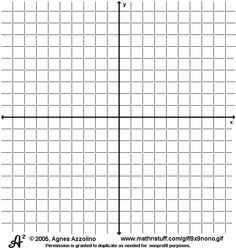
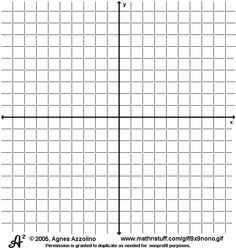
Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Math 3 Unit 7: Rationals**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **April 23**   * Simplify rational expressions   HW: worksheet 7.1 | **April 24**   * Multiply and divide rational expressions   HW: worksheet 7.2 | **April 25**   * Add and subtract rational expressions with common denominators   HW: worksheet 7.3 | **April 26**   * Add and subtract rational expressions   HW: worksheet 7.4 | **April 27**   * QUIZ!! * Solve rational equations   HW: worksheet 7.5 |
| **April 30**   * Solve rational expressions   HW: worksheet 7.6 | **May 1**   * Asymptotes and holes of rational functions   HW: worksheet 7.7 | **May 2**   * Graph rational functions   HW: worksheet 7.8 | **May 3**   * Review for test   HW: finish review | **May 4**   * TEST!!! |

**7.8 - Graph Rational Functions**

*For each rational function, determine the holes, vertical asymptotes, domain, and horizontal asymptote. Then graph the rational function.*

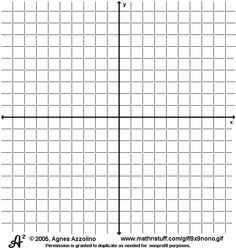
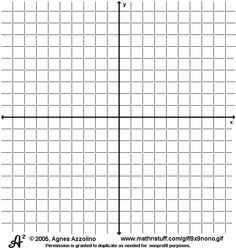
1. 2. 

Holes: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Holes: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

VA: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ VA: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Domain: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Domain: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

HA: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ HA: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. 4. 

Holes: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Holes: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

VA: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ VA: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Domain: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Domain: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

HA: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ HA: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**7.1 - Simplifying Rational Expressions**

*Simplify each rational expression.*

1. 2. 3.

4. 5. 6.

7. 8. 9.

**7.2 - Multiply and Divide Rational Expressions**

*Simplify each rational expression.*

1. 2. 3.

4. 5. 6.

7. 8. 9.

**7.7 - Asymptotes and Holes of Rational Functions**

*For each rational function, determine the holes, vertical asymptotes, domain, and horizontal asymptote.*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Holes:** | **Vertical Asymptotes:** | **Domain:** | **Horizontal Asymptote:** |
| 1. |  |  |  |  |
| 2. |  |  |  |  |
| 3. |  |  |  |  |
| 4. |  |  |  |  |
| 5. |  |  |  |  |
| 6. |  |  |  |  |
| 7. |  |  |  |  |
| 8. |  |  |  |  |

**7.6 - Solve Rational Equations with Extraneous Solutions**

*Solve for the variable.*

1. 2.

3. 4.

4. 5.

7. 8.

**7.3 - Add and Subtract Rational Expressions with Common Denominators**

*Simplify each rational expression.*

1. 2. 3.

4. 5. 6.

7. 8. 9.

10. 11. 12.

**7.4 - Add and Subtract Rational Expressions**

*Simplify each rational expression.*

1. 2. 3.

4. 5. 6.

7. 8. 9.

**7.5 - Solve Rational Equations**

*Solve for the variable.*

1. 2.

3. 4.

5. 6.

7. 8.