Rational Expressions and Equations: Worksheet

Algebra · Worksheet for https://jugami.com/algebra/rational-expressions/ · For instant feedback, try the self-guided quiz online.

Name _____ Date _____

Work each one on paper. Show your work, and state any excluded values.

1. Find the excluded values of $(x - 2)/(x^2 - 9)$.

Answer: _____

2. Simplify $(x^2 + x - 12)/(x - 3)$.

Answer: _____

3. Simplify $(3x - 6)/(x^2 - 2x)$.

Answer: _____

4. Multiply: $((x + 3)/(x - 2)) \cdot ((x^2 - 4)/(x + 3))$.

Answer: _____

5. Divide $(x^2 - 9)/(3x)$ by $(x + 3)/(6x)$.

Answer: _____

6. Add: $3/(x + 2) + 1/(x - 3)$.

Answer: _____

7. Subtract: $6/x - 2/(x + 3)$.

Answer: _____

8. Simplify $(1 - 9/x^2)/(1 + 3/x)$.

Answer: _____

9. Solve $3/x = 5/(x + 2)$.

Answer: _____

10. Solve $3x/(x - 2) = 6/(x - 2) + 2$.

Answer: _____

11. Give the asymptotes of $y = 2/(x - 4) - 1$.

Answer: _____

Bonus

A little extra practice with the same skills.

12. Simplify $(x^2 - 16)/(x - 4)$.

Answer: _____

13. Add: $2/x + 1/(x + 1)$.

Answer: _____

14. Solve $x^2/(x - 3) = 9/(x - 3)$.

Answer: _____