

Name: _____

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Math 9R Homework: Reducing Algebraic Fractions

1) Noah completed the problem below. His work is shown.

$$\frac{3y^2 - 3y}{3y^2 - 4y + 1}$$

$$\frac{\cancel{3y}(y-1)}{\cancel{(y-1)}(3y-1)}$$

$$\frac{\cancel{3y}}{\cancel{3y}-1}$$

$$\frac{1}{-1}$$

$$\boxed{-1}$$

After he finished the problem he looked over his work, like a good student, and realized he made a math "NO, NO!" What is Noah's mistake? _____

What is the correct answer? _____

Reduce.

2) $\frac{84xy^2}{62x^2y}$

3) $\frac{4x^3 - 4x}{16x^2 - 64}$

4) $\frac{5z - 5}{8 - 8z}$

5) $\frac{x^2 + 1}{1 + x^2}$

6) $\frac{3x^2 - 3x - 6}{3x^2 - 2x - 8}$

7) $\frac{3g^3 - 3g}{3g^2}$

8) $\frac{6r^2 + 9r - 6}{6r^2 + 24r + 24}$

9) $\frac{2x^4 - 32}{x^2 - 4x + 4}$

10) $\frac{x^2 - 4}{2x - 4}$

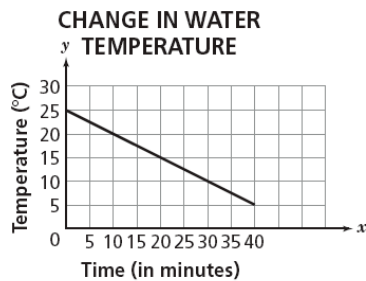
11) $\frac{2x^3y - 8xy}{2x^2 - 4x}$

12) $\frac{x^2 + 3x - 4}{x^2 - 1}$

13) $\frac{42h^3g^2}{36hg^3}$

ASSESSMENT REVIEW:

- 1) The graph below shows the change in water temperature of a glass of tap water placed into a freezer.



Use information in the graph to determine how many **total minutes** it takes the water to reach 0°C.

Answer _____ minutes

Explain how you determined your answer.