

DL CH 10 Review

Date _____ Period _____ number _____

Simplify each and state the excluded values.

$$1) \frac{6k-30}{k^2-8k+15}$$

$$\frac{6}{k-3} \text{ for } x \neq \{5, 3\}$$

$$2) \frac{x^2-8x+16}{x-4}$$

$$x-4: \{4\} \text{ for } x \neq$$

Solve each equation. Remember to check for extraneous solutions..

3) $9|-9+4m|-4=113$

$$\left\{ \frac{11}{2}, -1 \right\}$$

4) $-6+4|2p+1|=-2$

$$\{0, -1\}$$

5) $-5+\sqrt{7k}=2$

$$\{7\}$$

6) $3+(x-2)^2=12$

$$x=5, -1$$

7) $2(x-3)^3-7=9$

$$x=5$$

8) $12=6(x-4)^2+24$

$$\text{no solution}$$

Simplify each and state the excluded values (x not equal to)

9) $\frac{a+10}{a^2-4a-32} \div \frac{1}{a+4}$

$$\frac{a+10}{a-8} \quad x \neq -4, 8$$

10) $\frac{x-8}{x^2-10x+16} \cdot \frac{x^2-11x+18}{x+7}$

$$\frac{x-9}{x+7} \quad x \neq -7, 2, 8$$

Solve each equation using equivalent equations. Remember to check for extraneous solutions.

11) $\frac{1}{6a} = \frac{1}{6} + \frac{1}{3a}$

$$\{-1\}$$

12) $-4.4x - 16.81 = -6.7x - 6$

$$\{4.7\}$$