Redo Requirement for Chapter 12 Name _____

If you are one of the students who must redo the Chapter 12 Test, you need to do the following problems, showing all work. Show the completed problems to me and check it. Also, write up your analysis of the mistakes you made on your first attempt and correct the problems you missed. Then, I'll write you a Testing Center ticket to try again.

Simplify.

1a. $\frac{3a+15}{12a+60}$

1b. $\frac{17m-34}{5m-10}$

2a. $\frac{x^3+6x^2-4x-24}{x^2+4x-12}$

2b. $\frac{x^2-9y^2}{3x^2-15xy+18y^2}$

Perform the operations and simplify.

3a. $\frac{3}{m-2}+\frac{2}{m+2}$

3b. $\frac{-28}{a^2-2a-3}+\frac{7}{a-3}$

4a. $\frac{5}{y+2}-\frac{2}{y-1}$

4b. $\frac{7}{x^2-6x+9}-\frac{5}{x^2-3x}$

5a. $\frac{5v+5}{v-2}\cdot\frac{v^2-4v+4}{v^2-1}$

5b. $\frac{n^2-2n-35}{2mn}\cdot\frac{21mn^2}{7n-49}$

6a. $\frac{9a^2b}{a^2+16a+63}\div\frac{18ab^2}{a^2-5a-84}$

6b. $\frac{12m+4}{2m-6}\div\frac{3m^2+10m+3}{m^2-9}$

Solve.

7a. $\frac{4}{x^2-3x}=\frac{12}{x^2-9x}$

7b. $\frac{4}{2n+11}=\frac{2}{n-8}$

8a. $\frac{12}{x+2}=\frac{x^2+4x}{5x+10}$

8b. $\frac{a^2+4}{a^2-1}=\frac{a}{a-1}$

9a. $1+\frac{4}{m+2}=\frac{m+6}{m+2}$

9b. $\frac{3}{x+2}+\frac{5}{x}=\frac{8x+10}{x^2+2x}$

10a. $\frac{n-1}{2}=\frac{n}{3}$

10b. $\frac{12}{f-1}=\frac{10}{f+1}$

11a. $\frac{3}{c}-\frac{3}{5c}=\frac{6}{5}$

11b. $\frac{9}{2y}+\frac{3}{y}=\frac{8}{y}-\frac{1}{16}$

12a. Sarah can paint a room in 10 hours working alone. Rebecca can paint the same size room in 15 hours. How long will it take them to paint the room working together?

12b. One pipe can fill a pool in 12 hours. A larger pipe can fill the same pool in 6 hours. How long will it take both pipes to fill the pool?

13a. In 8 days, a cyclist can travel 200 miles. At this rate, how far can he travel in 12 days?

13b. John earned $108 for 16 hours of work at his part-time job. How much will he earn working 8 additional hours next week?

14a. Given $\Delta CAT \sim \Delta DOG$. If CA = 10, CT = 6, and DG = 12, what is the length of DO?
14b. Given $\Delta BUG \sim \Delta FLY$. If UG = 5, BU = 20, and FL = 12, then LY = ? .

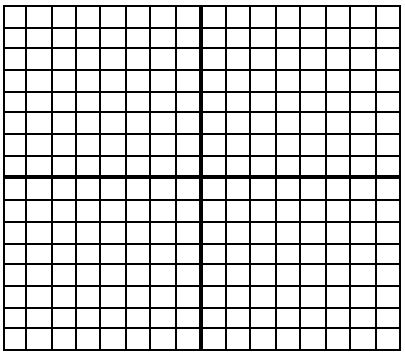
Determine the restricted values and state the domain of the given rational function.

15a. $f(x)=\frac{x^2-10x+21}{x^2-11x+28}$

15b. $g(x)=\frac{x^2-7x+12}{x^2-2x-3}$

Graph the following rational functions.

16a. $f(x)=\frac{x-4}{x+3}$



16b. $g(x)=\frac{x+2}{x-1}$