ALEKS® Section 6.3 Combining Rationals #3

Intermediate Algebra / Copy of MAT 135 Spring 2014 (Prof. Porter)

Student Name/ID:

1. Find the least common multiple of $7m^2$ and $4m^4$.

2. Find the least common multiple of these two expressions.

$4y^6v^7w^4$ and $10y^3w^5$

3. Find the least common denominator of $\frac{11}{x+5}$ and $\frac{3}{x-5}$.

4. Find the least common denominator of $\frac{5x}{3x-12}$ and $\frac{7}{2x-8}$.

5. Find the least common denominator of $\frac{8}{x^2-4x-45}$ and $\frac{-2}{x^2-9x}$.

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6. Subtract.

$$\frac{8}{x+5}-\frac{4}{x+5}$$

Simplify your answer as much as possible.

7. Subtract.

$$-\frac{4a-2b}{5a}-\frac{5a+7b}{5a}$$

Simplify your answer as much as possible.

8. Add.

$$\frac{8b+5}{12b}+\frac{7b-8}{12b}$$

Simplify your answer as much as possible.

9. Add.

$$\frac{c^2-9c}{c^2+3c-4}+\frac{5c+3}{c^2+3c-4}$$

Simplify your answer as much as possible.

10. Subtract.

$$\frac{7}{5}-\frac{9}{2c}$$

Simplify your answer as much as possible.

11. Subtract.

$$\frac{5}{6c} - \frac{9}{8c}$$

Simplify your answer as much as possible.

12. Subtract.

$$\frac{2c+5}{6c} - \frac{c-6}{8c}$$

Simplify your answer as much as possible.

13. Subtract.

$$\frac{5}{12v} - \frac{4}{9v^2}$$

Simplify your answer as much as possible.

14. Subtract.

$$\frac{4}{3v^2y} - \frac{5}{4v^3y^2}$$

Simplify your answer as much as possible.

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15. Add.

$$\frac{3d^2u}{8a^2c^3} + \frac{5v^3}{6ad^3}$$

Simplify your answer as much as possible.

16. Add.

$$\frac{3}{x-6} + \frac{4}{x+5}$$

Simplify your answer as much as possible.

17. Subtract.

$$\frac{x+9}{x+5} - \frac{x-3}{x}$$

Simplify your answer as much as possible.

18. Add.

$$\frac{x}{x-2} + \frac{3}{4x-8}$$

Simplify your answer as much as possible.

19. Subtract.

$$\frac{2x}{3x+12} - \frac{x-3}{4x+16}$$

Simplify your answer as much as possible.

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20. Subtract.

$$\frac{7}{5x-3}-\frac{4}{3-5x}$$

Simplify your answer as much as possible.

21. Add.

$$\frac{2}{3x^2-4x-7}+\frac{1}{3x^2-19x+28}$$

Simplify your answer as much as possible.

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Section 6.3 Combining Rationals #3 Answers for class Intermediate Algebra / Copy of MAT 135 Spring 2014

1. $28m^4$
2. $20y^6v^7w^5$
3. $(x+5)(x-5)$
4. $6(x-4)$
5. $x(x+5)(x-9)$
6. $\frac{4}{x+5}$
7. $\frac{-9a-5b}{5a}$
8. $\frac{5b-1}{4b}$
9. $\frac{c-3}{c+4}$
10. $\frac{14c-45}{10c}$
11. $\frac{-7}{24c}$
12. $\frac{5c+38}{24c}$
13. $\frac{15v-16}{36v^2}$
14. $\frac{16vy-15}{12v^3y^2}$
15. $\frac{9d^5u+20ac^3v^3}{24a^2c^3d^3}$
16. $\frac{7x-9}{(x-6)(x+5)}$

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17. $\dfrac{7x+15}{x(x+5)}$

18. $\dfrac{4x+3}{4(x-2)}$

19. $\dfrac{5x+9}{12(x+4)}$

20. $\dfrac{11}{5x-3}$

21. $\dfrac{1}{(x-4)(x+1)}$