

Lesson 7.1
Quiz - Form A

Unit 7

Add; then simplify, if possible:

1. $\frac{8x}{15} + \frac{x}{15}$

2. $\frac{6x - 20}{3x^2 - 2x - 5} + \frac{10}{3x^2 - 2x - 5}$

3. $\frac{a + 4}{4a} + \frac{a + 1}{3a}$

4. $\frac{5m}{4} + \frac{7m}{12} + \frac{m}{6}$

5. $\frac{5}{6x} + \frac{7x - 5}{4x} + \frac{x + 1}{3x}$

Lesson 7.1
Quiz - Form B

Unit 7

Add; then simplify, if possible:

1. $\frac{5x}{12} + \frac{3x}{12}$

2. $\frac{5x^2 - 10x}{2x^2 + 3x - 20} + \frac{-x^2}{2x^2 + 3x - 20}$

3. $\frac{3a - 2}{4a} + \frac{a + 6}{5a}$

4. $\frac{6x}{5} + \frac{x}{10} + \frac{3x}{4}$

5. $\frac{3x - 1}{15x} + \frac{2x}{5x} + \frac{4x - 1}{2x}$

Lessons 7.2-7.3
Quiz - Form A

Unit 7

Add. Simplify, if possible:

1. $\frac{a}{a+5} + \frac{8a+15}{a^2+5a}$

2. $\frac{m}{m-5} + \frac{-10-3m}{m^2-5m}$

3. $\frac{4r-1}{r^2-7r} + \frac{2}{r^2-49}$

4. $\frac{2}{x} + \frac{3}{x^2} + 8$

5. $m + \frac{7}{3m-4} + 5$

Lessons 7.2-7.3
Quiz - Form B

Unit 7

Add. Simplify, if possible:

1. $\frac{x}{x+4} + \frac{9x+20}{x^2+4x}$

2. $\frac{4}{a-4} + \frac{-16}{a^2-4a}$

3. $\frac{x-1}{x^2-25} + \frac{2x}{x^2-7x+10}$

4. $\frac{3}{a^2} + \frac{4}{a} + 6$

5. $5m + \frac{m-8}{2m-3} - 2$

Lessons 7.4-7.5
Quiz - Form A

Unit 7

Subtract. Simplify, if possible:

1. $4 - \frac{2x + 3}{x - 2}$

2. $\frac{x^2 + 5}{x^2 - 5x} - \frac{x + 3}{x}$

3. $\frac{m}{m^2 + m - 6} - \frac{m + 1}{m^2 - m - 12}$

4. $\frac{2r}{r^2 - 6r + 8} - \frac{r}{2 - r}$

5. $\frac{3x - 2}{2x - x^2} + \frac{5}{x - 2} + \frac{4}{x}$

Lessons 7.4-7.5
Quiz - Form B

Unit 7

Subtract. Simplify, if possible:

1. $5 - \frac{3a - 1}{2a}$

2. $\frac{x^2 - 8}{x^2 - 8x + 12} - \frac{x + 1}{x - 6}$

3. $\frac{m + 5}{m^2 - 2m - 8} - \frac{m}{m^2 - 5m + 4}$

4. $\frac{2a - 1}{a^2 - a - 30} + \frac{2}{6 - a}$

5. $\frac{3x}{x^2 + 6x - 16} - \frac{2}{2 - x} + \frac{3}{x + 8}$

Lessons 7.6-7.7
Quiz - Form A

Unit 7

Simplify:

1.
$$\frac{\frac{5}{x} + \frac{2}{4}}{\frac{1}{2} + \frac{3}{x}}$$

2.
$$\frac{\frac{3}{x} - \frac{x}{2}}{\frac{1}{x} + \frac{x}{3}}$$

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

4.
$$\frac{4 + \frac{3}{x-8}}{2 + \frac{1}{x-8}}$$

5.
$$\frac{\frac{5y}{y^2-16}}{\frac{10}{y-4} + \frac{10}{y+4}}$$

Lessons 7.6-7.7
Quiz - Form B

Unit 7

Simplify:

1.
$$\frac{\frac{3}{2} - \frac{1}{8}}{\frac{2}{3} + \frac{3}{x}}$$

2.
$$\frac{\frac{2}{x} + \frac{1}{3}}{\frac{x}{4} + \frac{3}{2}}$$

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

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

5.
$$\frac{\frac{2x}{x^2 - 49}}{\frac{3}{x-7} + \frac{3}{x+7}}$$

Add; then simplify if possible:

1. $\frac{x}{3x+21} + \frac{7}{3x+21}$

2. $\frac{a}{a^2-2a-15} + \frac{3}{a^2-2a-15}$

3. $\frac{5x-4}{4x} + \frac{7x+4}{2x} + \frac{3x-1}{8x}$

4. $\frac{2}{r^2+2r} + \frac{1}{r+2}$

5. $\frac{5m+2}{4m-8} + \frac{-2m-5}{m^2-m-2}$

6. $\frac{5}{a+1} + \frac{a^2-6a-2}{2a^2+3a+1}$

7. $3y-1 + \frac{3y}{y+5}$

8. $\frac{5}{r} + \frac{2}{r^2} + 5$

Subtract, then simplify if possible:

9. $11 - \frac{2x-1}{5x}$

10. $\frac{d^2-17}{d^2+2d-3} - \frac{d-5}{d-1}$

11. $\frac{a+3}{a-8} - \frac{a^2+3a-10}{a^2-10a+16}$

Subtract, then simplify if possible:

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

13. $\frac{5m}{m - 3} - \frac{-2m}{3 - m}$

14. $\frac{k^2 + 9k - 49}{k^2 - 7k} - \frac{k + 2}{7 - k}$

15. $\frac{3}{5x - 2} - \frac{5}{2 - 5x} - \frac{7}{10x - 4}$

16. $\frac{13 + 2c}{-28 + 11c - c^2} - \frac{c + 2}{7 - c}$

Simplify:

17. $\frac{5 - \frac{3}{4}}{3 - \frac{7}{8}}$

18. $\frac{\frac{8m - 4n}{2n}}{\frac{2m - n}{4n^2}}$

19. $\frac{\frac{r}{r-t}}{1 + \frac{t}{r-t}}$

20. $\frac{\frac{2a + 4}{a + 8} - \frac{a - 1}{a - 2}}{\frac{a^2 - 49}{a^2 + 6a - 16}}$

Add; then simplify if possible:

1. $\frac{3x - 2}{x + 3} + \frac{11}{x + 3}$

2. $\frac{2}{r^2 - r - 6} + \frac{r}{r^2 - r - 6}$

3. $\frac{3x + 1}{3x} + \frac{2x - 3}{6x} + \frac{4x - 2}{2x}$

4. $\frac{-16}{m^2 - 4m} + \frac{4}{m - 4}$

5. $\frac{4}{a^2 - 6a + 8} + \frac{2}{a - 2}$

6. $\frac{y - 1}{y^2 - 25} + \frac{2y}{y^2 - 7y - 10}$

7. $\frac{5}{2r - 5} + r + 3$

8. $9 + \frac{7}{p} + \frac{3}{p^2}$

Subtract, then simplify if possible:

9. $3 - \frac{3m - 2}{2m}$

10. $\frac{d^2 + 9d + 8}{d^2 + 2d - 8} - \frac{d + 3}{d - 2}$

Subtract, then simplify if possible:

11. $\frac{c^2 + 9c - 49}{c^2 - 7c} - \frac{c + 2}{c - 7}$

12. $\frac{2x^2 + 2x - 12}{x^2 - x - 12} - \frac{x - 2}{x - 4}$

13. $\frac{7r}{r - 5} - \frac{4r}{5 - r}$

14. $\frac{x^2 + 2}{x^2 - 5x + 4} - \frac{-3}{1 - x}$

15. $\frac{2}{3m - 5} - \frac{6}{5 - 3m} - \frac{15}{6m - 10}$

16. $\frac{3 + 2a}{3a - a^2} - \frac{a}{3 - a}$

Simplify:

17. $\frac{\frac{2}{5} + 7}{4 - \frac{3}{10}}$

18. $\frac{\frac{15x - 6}{4x}}{\frac{5x - 2}{12x^2}}$

19. $\frac{\frac{2k}{k - c} - 1}{\frac{k}{k - c} - 1}$

20. $\frac{\frac{q^2 - 49}{q^2 + 6q - 16}}{\frac{2q + 4}{q + 8} - \frac{q - 1}{q - 2}}$