

Simplifying Algebraic Fractions (A)

Name: _____

Date: _____

Simplify each expression as a single fraction.

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

2. $\frac{8x}{3} + \frac{x-2}{9}$

3. $\frac{4x}{8} - \frac{x}{6}$

4. $\frac{9x}{8} - \frac{x-1}{8}$

5. $\frac{6x}{4} + \frac{x-2}{7}$

6. $\frac{8x}{9} + \frac{x+3}{4}$

7. $\frac{4x}{7} - \frac{x-1}{9}$

8. $\frac{5x}{7} - \frac{x-3}{3}$

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

10. $\frac{5x}{8} + \frac{x+1}{6}$

Simplifying Algebraic Fractions (A) Answers

Name: _____

Date: _____

Simplify each expression as a single fraction.

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

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

2. $\frac{8x}{3} + \frac{x-2}{9}$

$$\frac{25x-2}{9}$$

3. $\frac{4x}{8} - \frac{x}{6}$

$$\frac{x}{3}$$

4. $\frac{9x}{8} - \frac{x-1}{8}$

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

5. $\frac{6x}{4} + \frac{x-2}{7}$

$$\frac{23x-4}{14}$$

6. $\frac{8x}{9} + \frac{x+3}{4}$

$$\frac{41x+27}{36}$$

7. $\frac{4x}{7} - \frac{x-1}{9}$

$$\frac{29x+7}{63}$$

8. $\frac{5x}{7} - \frac{x-3}{3}$

$$\frac{8x+21}{21}$$

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

$$\frac{16x-3}{5}$$

10. $\frac{5x}{8} + \frac{x+1}{6}$

$$\frac{19x+4}{24}$$

Simplifying Algebraic Fractions (B)

Name: _____

Date: _____

Simplify each expression as a single fraction.

1. $\frac{9x}{6} + \frac{x-2}{9}$

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

3. $\frac{7x}{2} - \frac{x-3}{2}$

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

5. $\frac{6x}{5} + \frac{x+3}{2}$

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

7. $\frac{5x}{7} + \frac{x}{6}$

8. $\frac{7x}{6} - \frac{x}{5}$

9. $\frac{x}{5} + \frac{x-3}{6}$

10. $\frac{2x}{6} - \frac{x-2}{4}$

Simplifying Algebraic Fractions (B) Answers

Name: _____

Date: _____

Simplify each expression as a single fraction.

1. $\frac{9x}{6} + \frac{x-2}{9}$

$$\frac{29x-4}{18}$$

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

$$\frac{x-2}{12}$$

3. $\frac{7x}{2} - \frac{x-3}{2}$

$$\frac{6x+3}{2}$$

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

$$\frac{9x-6}{14}$$

5. $\frac{6x}{5} + \frac{x+3}{2}$

$$\frac{17x+15}{10}$$

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

$$\frac{13x+4}{12}$$

7. $\frac{5x}{7} + \frac{x}{6}$

$$\frac{37x}{42}$$

8. $\frac{7x}{6} - \frac{x}{5}$

$$\frac{29x}{30}$$

9. $\frac{x}{5} + \frac{x-3}{6}$

$$\frac{11x-15}{30}$$

10. $\frac{2x}{6} - \frac{x-2}{4}$

$$\frac{x+6}{12}$$

Simplifying Algebraic Fractions (C)

Name: _____

Date: _____

Simplify each expression as a single fraction.

1. $\frac{6x}{7} - \frac{x+2}{8}$

2. $\frac{2x}{8} - \frac{x-1}{9}$

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

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

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

6. $\frac{4x}{2} - \frac{x-2}{2}$

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

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

9. $\frac{3x}{3} + \frac{x}{9}$

10. $\frac{6x}{5} + \frac{x-2}{7}$

Simplifying Algebraic Fractions (C) Answers

Name: _____

Date: _____

Simplify each expression as a single fraction.

1. $\frac{6x}{7} - \frac{x+2}{8}$

$$\frac{41x-14}{56}$$

2. $\frac{2x}{8} - \frac{x-1}{9}$

$$\frac{5x+4}{36}$$

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

$$\frac{17x-7}{14}$$

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

$$\frac{41x+18}{30}$$

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

$$\frac{2x-2}{3}$$

6. $\frac{4x}{2} - \frac{x-2}{2}$

$$\frac{3x+2}{2}$$

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

$$\frac{x-5}{30}$$

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

$$\frac{13x+1}{8}$$

9. $\frac{3x}{3} + \frac{x}{9}$

$$\frac{10x}{9}$$

10. $\frac{6x}{5} + \frac{x-2}{7}$

$$\frac{47x-10}{35}$$

Simplifying Algebraic Fractions (D)

Name: _____

Date: _____

Simplify each expression as a single fraction.

1. $\frac{5x}{5} + \frac{x+1}{6}$

2. $\frac{6x}{5} - \frac{x+1}{9}$

3. $\frac{4x}{8} + \frac{x-2}{9}$

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

5. $\frac{x}{4} + \frac{x}{4}$

6. $\frac{x}{7} - \frac{x}{4}$

7. $\frac{7x}{8} - \frac{x+1}{9}$

8. $\frac{8x}{9} - \frac{x}{8}$

9. $\frac{5x}{7} + \frac{x}{6}$

10. $\frac{4x}{5} - \frac{x+3}{8}$

Simplifying Algebraic Fractions (D) Answers

Name: _____

Date: _____

Simplify each expression as a single fraction.

1. $\frac{5x}{5} + \frac{x+1}{6}$

$$\frac{7x+1}{6}$$

2. $\frac{6x}{5} - \frac{x+1}{9}$

$$\frac{49x-5}{45}$$

3. $\frac{4x}{8} + \frac{x-2}{9}$

$$\frac{11x-4}{18}$$

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

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

5. $\frac{x}{4} + \frac{x}{4}$

$$\frac{x}{2}$$

6. $\frac{x}{7} - \frac{x}{4}$

$$\frac{-3x}{28}$$

7. $\frac{7x}{8} - \frac{x+1}{9}$

$$\frac{55x-8}{72}$$

8. $\frac{8x}{9} - \frac{x}{8}$

$$\frac{55x}{72}$$

9. $\frac{5x}{7} + \frac{x}{6}$

$$\frac{37x}{42}$$

10. $\frac{4x}{5} - \frac{x+3}{8}$

$$\frac{27x-15}{40}$$

Simplifying Algebraic Fractions (E)

Name: _____

Date: _____

Simplify each expression as a single fraction.

1. $\frac{8x}{9} + \frac{x}{7}$

2. $\frac{3x}{9} - \frac{x+1}{9}$

3. $\frac{x}{6} + \frac{x}{8}$

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

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

6. $\frac{4x}{4} - \frac{x-3}{4}$

7. $\frac{8x}{5} + \frac{x}{6}$

8. $\frac{7x}{7} + \frac{x}{4}$

9. $\frac{2x}{8} + \frac{x}{5}$

10. $\frac{6x}{6} - \frac{x}{5}$

Simplifying Algebraic Fractions (E) Answers

Name: _____

Date: _____

Simplify each expression as a single fraction.

1. $\frac{8x}{9} + \frac{x}{7}$

$$\frac{65x}{63}$$

2. $\frac{3x}{9} - \frac{x+1}{9}$

$$\frac{2x-1}{9}$$

3. $\frac{x}{6} + \frac{x}{8}$

$$\frac{7x}{24}$$

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

$$\frac{x-1}{2}$$

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

$$\frac{13x+1}{8}$$

6. $\frac{4x}{4} - \frac{x-3}{4}$

$$\frac{3x+3}{4}$$

7. $\frac{8x}{5} + \frac{x}{6}$

$$\frac{53x}{30}$$

8. $\frac{7x}{7} + \frac{x}{4}$

$$\frac{5x}{4}$$

9. $\frac{2x}{8} + \frac{x}{5}$

$$\frac{9x}{20}$$

10. $\frac{6x}{6} - \frac{x}{5}$

$$\frac{4x}{5}$$

Simplifying Algebraic Fractions (F)

Name: _____

Date: _____

Simplify each expression as a single fraction.

1. $\frac{x}{5} - \frac{x}{8}$

2. $\frac{8x}{9} + \frac{x+1}{6}$

3. $\frac{3x}{3} + \frac{x-3}{7}$

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

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

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

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

8. $\frac{9x}{4} + \frac{x+3}{4}$

9. $\frac{4x}{3} + \frac{x+3}{9}$

10. $\frac{x}{9} - \frac{x-1}{4}$

Simplifying Algebraic Fractions (F) Answers

Name: _____

Date: _____

Simplify each expression as a single fraction.

1. $\frac{x}{5} - \frac{x}{8}$

$$\frac{3x}{40}$$

2. $\frac{8x}{9} + \frac{x+1}{6}$

$$\frac{19x+3}{18}$$

3. $\frac{3x}{3} + \frac{x-3}{7}$

$$\frac{8x-3}{7}$$

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

$$\frac{25x-7}{56}$$

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

$$\frac{4x-3}{9}$$

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

$$\frac{7x-15}{10}$$

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

$$\frac{-x+4}{12}$$

8. $\frac{9x}{4} + \frac{x+3}{4}$

$$\frac{10x+3}{4}$$

9. $\frac{4x}{3} + \frac{x+3}{9}$

$$\frac{13x+3}{9}$$

10. $\frac{x}{9} - \frac{x-1}{4}$

$$\frac{-5x+9}{36}$$

Simplifying Algebraic Fractions (G)

Name: _____

Date: _____

Simplify each expression as a single fraction.

1. $\frac{7x}{3} - \frac{x-2}{3}$

2. $\frac{6x}{5} - \frac{x-1}{5}$

3. $\frac{4x}{9} - \frac{x+2}{2}$

4. $\frac{x}{8} + \frac{x}{8}$

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

6. $\frac{8x}{9} + \frac{x}{8}$

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

8. $\frac{2x}{7} + \frac{x+1}{9}$

9. $\frac{2x}{3} - \frac{x-2}{6}$

10. $\frac{5x}{6} + \frac{x-2}{4}$

Simplifying Algebraic Fractions (G) Answers

Name: _____

Date: _____

Simplify each expression as a single fraction.

1. $\frac{7x}{3} - \frac{x-2}{3}$

$$\frac{6x+2}{3}$$

2. $\frac{6x}{5} - \frac{x-1}{5}$

$$\frac{5x+1}{5}$$

3. $\frac{4x}{9} - \frac{x+2}{2}$

$$\frac{-x-18}{18}$$

4. $\frac{x}{8} + \frac{x}{8}$

$$\frac{x}{4}$$

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

$$\frac{2x-3}{3}$$

6. $\frac{8x}{9} + \frac{x}{8}$

$$\frac{73x}{72}$$

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

$$\frac{11x-2}{6}$$

8. $\frac{2x}{7} + \frac{x+1}{9}$

$$\frac{25x+7}{63}$$

9. $\frac{2x}{3} - \frac{x-2}{6}$

$$\frac{3x+2}{6}$$

10. $\frac{5x}{6} + \frac{x-2}{4}$

$$\frac{13x-6}{12}$$

Simplifying Algebraic Fractions (H)

Name: _____

Date: _____

Simplify each expression as a single fraction.

1. $\frac{9x}{9} + \frac{x}{8}$

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

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

4. $\frac{9x}{3} - \frac{x+2}{3}$

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

6. $\frac{2x}{7} + \frac{x+3}{8}$

7. $\frac{6x}{3} - \frac{x-2}{3}$

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

9. $\frac{5x}{7} - \frac{x+2}{2}$

10. $\frac{8x}{3} - \frac{x-1}{8}$

Simplifying Algebraic Fractions (H) Answers

Name: _____

Date: _____

Simplify each expression as a single fraction.

1. $\frac{9x}{9} + \frac{x}{8}$

$$\frac{9x}{8}$$

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

$$\frac{5x-6}{6}$$

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

$$\frac{11x-6}{24}$$

4. $\frac{9x}{3} - \frac{x+2}{3}$

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

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

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

6. $\frac{2x}{7} + \frac{x+3}{8}$

$$\frac{23x+21}{56}$$

7. $\frac{6x}{3} - \frac{x-2}{3}$

$$\frac{5x+2}{3}$$

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

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

9. $\frac{5x}{7} - \frac{x+2}{2}$

$$\frac{3x-14}{14}$$

10. $\frac{8x}{3} - \frac{x-1}{8}$

$$\frac{61x+3}{24}$$

Simplifying Algebraic Fractions (I)

Name: _____

Date: _____

Simplify each expression as a single fraction.

1. $\frac{x}{9} + \frac{x}{2}$

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

3. $\frac{3x}{9} - \frac{x-1}{5}$

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

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

6. $\frac{2x}{7} - \frac{x+2}{9}$

7. $\frac{9x}{5} - \frac{x+2}{4}$

8. $\frac{8x}{4} + \frac{x+3}{9}$

9. $\frac{5x}{7} + \frac{x}{8}$

10. $\frac{x}{7} - \frac{x+1}{6}$

Simplifying Algebraic Fractions (I) Answers

Name: _____

Date: _____

Simplify each expression as a single fraction.

1. $\frac{x}{9} + \frac{x}{2}$

$$\frac{11x}{18}$$

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

$$\frac{8x+21}{35}$$

3. $\frac{3x}{9} - \frac{x-1}{5}$

$$\frac{2x+3}{15}$$

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

$$\frac{7x+1}{4}$$

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

$$\frac{15x+2}{6}$$

6. $\frac{2x}{7} - \frac{x+2}{9}$

$$\frac{11x-14}{63}$$

7. $\frac{9x}{5} - \frac{x+2}{4}$

$$\frac{31x-10}{20}$$

8. $\frac{8x}{4} + \frac{x+3}{9}$

$$\frac{19x+3}{9}$$

9. $\frac{5x}{7} + \frac{x}{8}$

$$\frac{47x}{56}$$

10. $\frac{x}{7} - \frac{x+1}{6}$

$$\frac{-x-7}{42}$$

Simplifying Algebraic Fractions (J)

Name: _____

Date: _____

Simplify each expression as a single fraction.

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

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

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

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

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

6. $\frac{2x}{9} - \frac{x+3}{8}$

7. $\frac{9x}{7} - \frac{x}{2}$

8. $\frac{4x}{9} + \frac{x}{2}$

9. $\frac{9x}{9} + \frac{x-1}{4}$

10. $\frac{9x}{3} - \frac{x-1}{5}$

Simplifying Algebraic Fractions (J) Answers

Name: _____

Date: _____

Simplify each expression as a single fraction.

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

$$\frac{9x-1}{8}$$

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

$$\frac{-x+2}{6}$$

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

$$\frac{17x-9}{24}$$

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

$$\frac{17x-7}{56}$$

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

$$\frac{57x-21}{56}$$

6. $\frac{2x}{9} - \frac{x+3}{8}$

$$\frac{7x-27}{72}$$

7. $\frac{9x}{7} - \frac{x}{2}$

$$\frac{11x}{14}$$

8. $\frac{4x}{9} + \frac{x}{2}$

$$\frac{17x}{18}$$

9. $\frac{9x}{9} + \frac{x-1}{4}$

$$\frac{5x-1}{4}$$

10. $\frac{9x}{3} - \frac{x-1}{5}$

$$\frac{14x+1}{5}$$