**Simplifying Algebraic Fractions**

Simplify, where possible:

1. $\frac{2(x+3)}{3\left(x+3\right)}$

2. $\frac{2(x+3)}{\left(x+3\right)}$

3. $\frac{(x+3)}{2\left(x+3\right)}$

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

5. $\frac{(x+3)(x+4)}{2x+6}$

6. $\frac{(x+3)(x+4)}{2x+8}$

7. $\frac{x^{2}+7x+12}{2x+8}$

8. $\frac{x^{2}+7x+12}{(x+4)(x-9)}$

9. $\frac{x^{2}+7x+12}{x^{2}-5x-36}$

10. $\frac{2x^{2}+14x+24}{x^{2}-5x-36}$

11. $\frac{2x^{2}+14x+24}{3x^{2}-15x-108}$

12.$ \frac{2x^{2}+14x+24}{3x^{2}+4x-15}$

13.$ \frac{14x-24-2x^{2}}{3x^{2}+4x-15}$

14.$ \frac{14x-24-2x^{2}}{3x^{2}-4x-15}$

**Simplifying Algebraic Fractions**

Simplify, where possible:

1. $\frac{2(x+3)}{3\left(x+3\right)}$

2. $\frac{2(x+3)}{\left(x+3\right)}$

3. $\frac{(x+3)}{2\left(x+3\right)}$

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

5. $\frac{(x+3)(x+4)}{2x+6}$

6. $\frac{(x+3)(x+4)}{2x+8}$

7. $\frac{x^{2}+7x+12}{2x+8}$

8. $\frac{x^{2}+7x+12}{(x+4)(x-9)}$

9. $\frac{x^{2}+7x+12}{x^{2}-5x-36}$

10. $\frac{2x^{2}+14x+24}{x^{2}-5x-36}$

11. $\frac{2x^{2}+14x+24}{3x^{2}-15x-108}$

12. $\frac{2x^{2}+14x+24}{3x^{2}+4x-15}$

13. $\frac{14x-24-2x^{2}}{3x^{2}+4x-15}$

14. $\frac{14x-24-2x^{2}}{3x^{2}-4x-15}$

Simplifying Algebraic Fractions

1. $\frac{2}{3}$

2. $2$

3. $\frac{1}{2} $

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

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

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

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

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

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

10. $\frac{2(x+3)}{x-9}$

11. $\frac{2(x+3)}{3(x-9)}$

12. $\frac{2(x+4)}{3(x-5)}$

13. $-\frac{2\left(x-3\right)\left(x-4\right)}{\left(3x-5\right)\left(x+3\right)}$

14. $-\frac{2(x-4)}{3x+5}$

Simplifying Algebraic Fractions

1. $\frac{2}{3}$

2. $2$

3. $\frac{1}{2} $

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

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

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

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

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

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

10. $\frac{2(x+3)}{x-9}$

11. $\frac{2(x+3)}{3(x-9)}$

12. $\frac{2(x+4)}{3(x-5)}$

13. $-\frac{2\left(x-3\right)\left(x-4\right)}{\left(3x-5\right)\left(x+3\right)}$

14. $-\frac{2(x-4)}{3x+5}$