

Simplifying Algebraic Fractions *fluency*

 Simplify fully

1 $\frac{6x}{9}$

2 $\frac{4x^2}{2x}$

3 $\frac{10xy}{15y}$

4 $\frac{12a^3}{8a}$

5 $\frac{9x^2y}{3xy^2}$

6 $\frac{14m}{21m^2}$

 Simplify fully

7 $\frac{3x+6}{3}$

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

9 $\frac{x^2+5x}{x}$

10 $\frac{6x+9}{3x}$

11 $\frac{5x-10}{x-2}$

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

 Simplify fully

13 $\frac{x^2+5x+6}{x+2}$

14 $\frac{x^2-9}{x+3}$

15 $\frac{x^2-4x}{x^2-16}$

16 $\frac{x+4}{x^2+6x+8}$

17 $\frac{x^2-x-12}{x^2-16}$

18 $\frac{x^2+7x+10}{x^2+4x-5}$

 Simplify fully

19 $\frac{2x^2+7x+3}{x+3}$

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

21 $\frac{3x^2-12}{x^2+x-6}$

22 $\frac{2x^2+x-6}{x^2-4}$

23 $\frac{6x^2+x-2}{4x^2-1}$

24 $\frac{9x^2-4}{3x^2+x-2}$

 Simplify fully

25 $\frac{x^2-9}{3-x}$

26 $\frac{2x-2}{1-x}$

27 $\frac{x^2+2xy+y^2}{x^2-y^2}$

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

29 $\frac{x^2-5x+6}{4-x^2}$

30 $\frac{8x^2-2}{4x^2+4x+1}$