

# Master Maths 9 Worksheet 20

## Algebraic Fractions 1

# 20

*Name:* \_\_\_\_\_

**1. Simplify the following algebraic fractions.**

(a)  $\frac{8}{10}$

(b)  $\frac{12a}{36a}$

(c)  $\frac{10x}{15}$

(d)  $\frac{24n}{18}$

**2. Factorise and then simplify.**

(a)  $\frac{3x+15}{6}$

(b)  $\frac{9a-21}{9}$

(c)  $\frac{3a-9}{4a-12}$

(d)  $\frac{a^2-9}{a-3}$

(e)  $\frac{x^2+7x+12}{4x+12}$

(f)  $\frac{n^2-3n-18}{3n-18}$

(g)  $\frac{x^2+2x-15}{x^2-7x+12}$

(h)  $\frac{a^2-25}{a^2-11a+30}$

**3. Simplify the following.**

(a)  $\frac{2c}{9} + \frac{5c}{9}$

(b)  $\frac{5a}{7} - \frac{3a}{7}$

(c)  $\frac{5c}{9} - \frac{c}{3}$

(d)  $\frac{2a}{5} + \frac{3a}{4}$

(e)  $\frac{x+1}{4} + \frac{x+4}{4}$

(f)  $\frac{x+2}{3} + \frac{x}{6}$

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

(h)  $\frac{4x+1}{3} - \frac{x-2}{5}$

(i)  $\frac{2x+5}{7} + \frac{3x-4}{8}$

(j)  $\frac{3x+4}{9} - \frac{5x-3}{7}$