

# Master Maths 7 Worksheet 36

## Simplifying Algebraic Expressions 2

# 36

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

1. Simplify the following algebraic expressions.

- |   |  |
|---|--|
| (a) $m \times m \times m$                                     |  |
| (b) $a \times a \times a \times a \times a \times a$          |  |
| (c) $3 \times n \times 4 \times n$                            |  |
| (d) $2 \times y \times 5 \times y \times y$                   |  |
| (e) $3 \times p \times 2 \times p \times 2 \times p \times 2$ |  |
| (f) $7c \times 3c \times 2c \times c$                         |  |
| (g) $a \times a \times a \times b \times b$                   |  |
| (h) $x \times y \times y \times x \times y \times y$          |  |
| (i) $m \times n \times m \times n \times n \times m \times m$ |  |
| (j) $2a \times b \times 6a \times 5b \times a$                |  |
| (k) $5 \times m \times n \times 2m \times 4n$                 |  |
| (l) $x \times 2y \times 3x \times x \times 5x$                |  |

2. Simplify the following algebraic fractions.

- |                     |                      |                      |
|---------------------|----------------------|----------------------|
| (a) $\frac{12x}{4}$ | (b) $\frac{18a}{2}$  | (c) $\frac{24m}{6}$  |
|                     |                      |                      |
| (d) $\frac{8n}{18}$ | (e) $\frac{12c}{24}$ | (f) $\frac{28}{16m}$ |
|                     |                      |                      |

3. Simplify the following algebraic fractions.

- |                            |                             |                                 |
|----------------------------|-----------------------------|---------------------------------|
| (a) $\frac{6n}{18n}$       | (b) $\frac{36a}{20a}$       | (c) $\frac{15ab}{10a}$          |
|                            |                             |                                 |
| (d) $\frac{3xy}{24x}$      | (e) $\frac{12a}{36ab}$      | (f) $\frac{18xyz}{12xy}$        |
|                            |                             |                                 |
| (g) $\frac{16mp}{24mnp}$   | (h) $\frac{15agk}{20abg}$   | (i) $\frac{18pqr}{16qrs}$       |
|                            |                             |                                 |
| (j) $\frac{6x^4}{4x}$      | (k) $\frac{8m^3}{16m^5}$    | (l) $\frac{15n^6}{25n^8}$       |
|                            |                             |                                 |
| (m) $\frac{6x^2y^3}{18xy}$ | (n) $\frac{8m^5n^2}{4m^6n}$ | (o) $\frac{24x^7y^6}{30x^4y^9}$ |
|                            |                             |                                 |