



# Index Laws: Multiplying and Dividing 2

1 Write these products in index form

a)  $4a^2 \times 3a^3$

b)  $5a^4 \times 4a^5$

c)  $6a^4 \times 2a$

d)  $7b^2 \times 3b^2$

e)  $5b^6 \times 3b^3$

f)  $2m^3 \times 9m^4$

g)  $12m^3 \times 3m^4$

h)  $8a^9 \times 7a^3$

i)  $4a^3 \times 6a^4$

j)  $8y^6 \times 2y$

2 Write the answers to these divisions in index form

a)  $21y^6 \div 7y^3$

b)  $15y^{10} \div 3y^4$

c)  $12a^8 \div 4a^6$

d)  $9y^6 \div 3y$

e)  $16m^4 \div 4m^3$

f)  $32a^{11} \div 2a^7$

g)  $7a^{14} \div 7a^7$

h)  $7b^7 \div b$

i)  $15m^9 \div 5m^3$

j)  $18a^8 \div 6a^2$

## Answers

### Question 1

- |                      |               |
|----------------------|---------------|
| a) $12a^5$           | b) $20a^9$    |
| c) $12a^5 \times 2a$ | d) $21b^4$    |
| e) $15b^9$           | f) $18m^7$    |
| g) $36m^7$           | h) $56a^{12}$ |
| i) $24a^7$           | j) $12y^7$    |

### 2 Write the answers to these divisions in index form

- |                     |            |
|---------------------|------------|
| a) $3y^3$           | b) $5y^6$  |
| c) $3a^2 \div 4a^6$ | d) $3y^5$  |
| e) $4m$             | f) $16a^4$ |
| g) $a^7$            | h) $7b^6$  |
| i) $3m^6 \div 5m^3$ | j) $3a^4$  |