

Powers

- 1) Write the following using indices:

eg. $3 \times 3 \times 3 \times 3 = 3^4$

a) $2 \times 2 \times 2 \times 2$

d) $12 \times 12 \times 12 \times 12 \times 12$

b) $4 \times 4 \times 4$

e) 3.6×3.6

c) $5 \times 5 \times 5 \times 5 \times 5 \times 5$

f) $5.2 \times 5.2 \times 5.2$

- 2) Write each of the following as a single power:

eg. $5^2 \times 5^4 = 5^6$

a) $6^2 \times 6^3$

d) $5^3 \times 5$

b) $7^4 \times 7^2$

e) $2^9 \times 2^3$

c) $9^3 \times 9^6$

f) $7.2^3 \times 7.2^2$

- 3) Write each of the following as a single power:

eg. $7^5 \div 7^2 = 7^3$

a) $9^5 \div 9^3$

d) $\frac{7^8}{7^3}$

b) $6^9 \div 6^5$

e) $\frac{3^6}{3}$

c) $11^7 \div 11^2$

f) $\frac{8^{15}}{8^4}$

- 4) Write each of the following as a single power:

eg. $\frac{7^3 \times 7^8}{7^6} = \frac{7^{11}}{7^6} = 7^5$

a) $\frac{4^7 \times 4^3}{4^6}$

b) $\frac{9^2 \times 9^6}{9^4}$

- 5) Match together cards with the same answer

5^7

$5^{10} \div 5^6$

$5^6 \times 5^2$

5^3

5^2

5^8

5×5

$\frac{5^2 \times 5^4}{5^3}$

$5^2 \times 5^5$

5^4