

Master Maths 9 Worksheet 23

Exponentials 2

23

Name: _____

1. Simplify.

(a) $\frac{(x^2y^3)^4}{xy^6}$

(b) $\frac{(x^2y^3)^3 \times (xy^2)^6}{(x^3y^2)^3}$

(c) $\frac{6a^2b^3}{(a^2b^2)^3} \times \frac{(a^5b^2)^3}{10ab}$

(d) $\frac{(3x^2y^3)^2}{5(x^2)^2y^6} \div \frac{3x^2y^5}{10x^5y^8}$

(e) $\left(\frac{2x^2y^3}{3xy}\right)^3 \div \left(\frac{4x^2y^3}{9x^3y}\right)^2$

2. Convert the following numbers into scientific notation.

(a) 800 000

(b) 500 000 000

(c) 561 000 000 000

(d) 7 892 000 000

(e) 0.000 000 6

(f) 0.000 04

(g) 0.000 000 675 2

(h) 0.000 000 803 4

3. Convert the following numbers into numeral form.

(a) 8×10^5

(b) 6.7×10^3

(c) 8.93×10^7

(d) 1.207×10^4

(e) 3.7×10^{-6}

(f) 9.925×10^{-4}

(g) 1.15×10^{-8}

(h) 7.8165×10^{-3}