

Indices quiz

Sunday, November 03, 2013

6:52 PM

Simplify the following:

$$\textcircled{1} \quad x^5 \times x^3 =$$

$$\textcircled{2} \quad 4x^3 \times 6x^2 =$$

$$\textcircled{3} \quad 7x^3 \times 8y^2 =$$

$$\textcircled{4} \quad 9a^2b^3 \times 10a^3b^4 =$$

$$\textcircled{5} \quad \frac{x^5}{x^3} =$$

$$\textcircled{6} \quad \frac{5x^2}{10x} =$$

$$\textcircled{7} \quad \frac{4x^2}{2x^5} =$$

$$\textcircled{8} \quad \frac{12x^3y^5}{3x^2y^6} =$$

$$\textcircled{9} \quad x^0 =$$

$$\textcircled{10} \quad 7x^0 =$$

$$\textcircled{11} \quad (8x)^0 =$$

$$\textcircled{12} \quad x^5y^0z^4 =$$

$$\textcircled{13} \quad \frac{2x^5 \times 4x^3}{5x^2 \times 34} =$$

$$\overline{5x^2 \times 3y}$$

$$(14) (x^2 y^3)^4 =$$

$$(15) \left(\frac{x^2}{y^3}\right)^4 =$$

$$(16) \left(\frac{3x^2}{5y^4}\right)^3 =$$

$$(17) \frac{4}{x^{-2}} =$$

$$(18) \left(\frac{x}{y}\right)^{-1} =$$

$$(19) \left(\frac{x^2}{y^3}\right)^{-3} =$$

$$(20) \text{ Write in index form: } \sqrt{x} =$$

$$(21) \text{ Write in index form: } \sqrt[3]{x^4} =$$

$$(22) \text{ Simplify the following into one term of base 5.}$$

$$5^2 \times 25^2 =$$

$$\text{Hint: } 25 = 5^2$$