Warm Up...

Warm Up - Laws of Exponents.pdf

Simplify each of the following using exponent laws:

(1) $m^2 \times m^5 = m^7$

(2) $(5w^3)^2 = 5^2 w^6 = 25w^6$

(3) $(-2a^3b^6)(3a^2b^8) = -6a^5b^{14}$

(4) $\frac{x^8}{x^4} = x^4$

(5) $15a^{10} \div (2a^4)^3 = \frac{15}{8a^2}$

(6) $-15p^7q \div -5p^6q = 3p$

(7) $\frac{5^2 \times 5^8}{5 \times 5^1} = \frac{5^{10}}{5^2} = 5^8$

(8) $\frac{2w^5 \times 8w^{10}}{4w^{15}} = \frac{16w^{15}}{4w^{15}} = 4$

(9) $\frac{(5a^9b)(4b^7)}{3a^2 \times 4a^3b^5} = \frac{20a^9b^8}{12a^5b^5} = \frac{5a^4b^3}{3}$

Exponents review W.S

1) n^5 2) $2n^4$ 3) $6b^6$

4) $3x^4$ 5) $9a^3$ 6) $4p^6$

7) $8x^3$ 8) x^6 9) $4m^2$

10) $9b^6$ 11) 4 12) $4v^2$

13) 4 14) $\frac{4}{x}$ or $4x^{-1}$ 15) $\frac{2}{k^2}$

16) 2 17) $12ca^4b^4$

18) $4p^5m$ 19) $\frac{1}{m^5n}$

20) $2y^5x^3z^5$ 21) $\frac{1}{v^{12}}$

22) $\frac{1}{y^3}$ 23) $\frac{1}{4u^2}$

24) $\frac{1}{4b^9a^5}$ 25) $\frac{1}{\ }$

NO CALCULATOR...Evalute the following:

$36^{\frac{1}{2}} =$

$\sqrt{36}$

$= 6$

$16^{0.25} =$

$\frac{1}{4}$

$\sqrt[4]{16}$

$= 2$

$27^{\frac{2}{3}} =$

$\frac{1}{3} \times 2$

$\left(\sqrt[3]{27}\right)^2$

$(3)^2$

$= 9$

$32^{\frac{6}{5}} =$

$125^{\frac{4}{3}} =$

$4^{1.5} =$

Practice Problems...

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#3, 5, 6, 7, 8, 10, 11, 12, 15, 16

for homework

Attachments

Image (19).jpg

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Worksheet - Simplifying Radicals (Square Roots).pdf

Review - Laws of Exponents.pdf

Review - Laws of Exponents (Grade 9).pdf

Review Solutions - Laws of Exponents (Grade 9).pdf

Warm Up - Laws of Exponents.pdf

Assignment - Radicals and Exponent Laws Feb. 2014.pdf