

Curriculum Outcome

(N1) Demonstrate an understanding of powers with integral bases (excluding base 0) and whole number exponents by: representing repeated multiplication using powers; using patterns to show that a power with an exponent of zero is equal to one; solving problems involving powers.

(N2) Demonstrate an understanding of operations on powers with integral bases (excluding base 0) and whole number exponents.

Student Friendly:

“Exponent Law for a
Quotient of Powers”

Warm Up

Grade 9

Simplify using laws of exponents:

$$[(-2)^5 \times (-2)^2]^2 - [(-3)^5 \div (-3)^2]^4$$

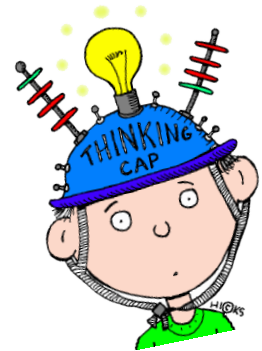
$$[(-2)^7]^2 - [(-3)^3]^4$$

$$(-2)^{14} - (-3)^{12}$$

Warm Up

Grade 9

Simplify then Evaluate



$$1) \quad (-2)^7 \div (-2)^3 - (-2)^5 \div (-2)^2$$

$$(-2)^4 - (-2)^3$$

$$16 - (-8)$$

$$24$$

Warm Up

Grade 9



Simplify then Evaluate

$$2) \quad (-4)^9 \div (-4)^5 + (-4)^7 \div (-4)^2$$

$$(-4)^4 + (-4)^5$$

$$256 + (-1024)$$

$$-768$$

Warm Up

Grade 9



Simplify then Evaluate

$$3) \frac{2^4 (2^3 \div 2^2) - 4^0}{3(3^4 \div 3^2)}$$

Top:

$$2^4 (2^3 \div 2^2) - 4^0$$

$$2^4 (2^1) - 4^0$$

$$2^5 - 4^0$$

$$32 - 1$$

$$31$$

Bottom:

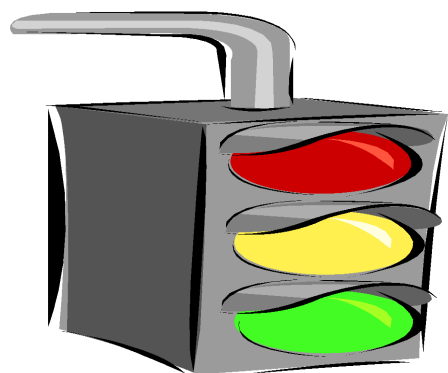
$$3 (3^4 \div 3^2)$$

$$3 (3^2)$$

$$3^3$$

$$27$$

$$\frac{\text{Top} = 31}{\text{Bottom} = 27}$$



Class/Homework

Page 76 & 77

Questions

3, 4acegh, 5bdfh, 7,
8, 10, 11, 13, 17, 18, 19

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Questions

4def, 5abc, 6, 7, 8ab, 9,
10, 14, 15, 16, 17, 19

Attachments

Exponent Law 1 Review.pdf

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