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:

Quiz Review

Warm Up
Grade 9

1) Complete the following:

a) $-(7)^5$

Base:
Exponent:
Evaluate:

b) $(-5)^4$

Base:
Exponent:
Evaluate:

c) -6^3

Base:
Exponent:
Evaluate:

d) $-(-2)^3(3)^2$

Base:
Exponent:
Evaluate:

2) Write as a power then evaluate

a) (-5)(-5)(-5)(-5)

b) -(3)(3)(-2)(-2)(7)(7)

3) Write 78 125 as a base of 5

4) Write the 2 309 157 as a power of ten

5) Write the following in standard form:

a) $(3 \times 10^6) + (4 \times 10^2) + (7 \times 10^7) + (2 \times 10^0) + (5 \times 10^3)$

6)

a) $-2^3 + 2^5 \div 2^4 \times 2^2 + (4+6^2)^0$

b) $[-(2-5)^3 \div (-3+2)^7 + (-2)^0 \times (-4)^2] + (-1^0)^3$

Warm Up
Grade 9

1)
Complete the following:

a) $-(7)^5$

Base: 7
Exponent: 5
Evaluate: -16 807

b) $(-5)^4$

Base: (-5)
Exponent: 4
Evaluate: 625

c) -6^3

Base: 6
Exponent: 3
Evaluate: -216

d) $-(-2)^3(3)^2$

Base: (-2), (3)
Exponent: 3, 2
Evaluate: 72

2)
Write as a power then evaluate

a) $(-5)(-5)(-5)(-5)$

$(-5)^4$

$= 625$

b) $-(3)(3)(-2)(-2)(7)(7)$

$-(3)^2(-2)^2(7)^2$

$= -1764$

3)
Write 78 125 as a base of 5

$(5)^7$

78 125
5 | 15625
5 | 3125
5 | 625
5 | 125
5 | 25
5 | 5
5

4)

Write the 2 309 157 as a power of ten

$(2 \times 10^6) + (3 \times 10^5) + (9 \times 10^3) + (1 \times 10^2) + (5 \times 10^1) + (7 \times 10^0)$

5)

Write the following in standard form:

a) $(3 \times 10^6) + (4x\ 10^2) + (7x\ 10^7) + (2x\ 10^0) + (5 \times 10^3)$

10^7 10^6 10^5 10^4 10^3 10^2 10^1 10^0

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Warm Up
Grade 9

6) Simplify then evaluate

a) $-2^3 + 2^5 \div 2^4 \times 2^2 + (4+6^2)^0$

$-2^3 + 2^5 \div 2^4 \times 2^2 + (1)$

$-8 + 32 \div 16 \times 4 + (1)$

$-8 + 2 \times 4 + (1)$

$-8 + 8 + (1)$

1

b) $[-(2-5)^3 \div (-3+2)^7 + (-2)^0 \times (-4)^2] + (-1^0)^3$

$[-(-3)^3 \div (-1)^7 + (-2)^0 \times (-4)^2] + (-1^0)^3$

$[-(-27) \div (-1) + 1 \times (16)] + (-1^0)^3$

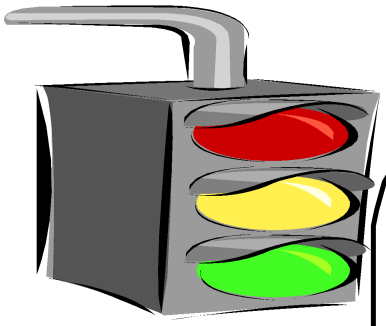
$[27 \div (-1) + 1 \times (16)] + (-1^0)^3$

$[-27 + (16)] + (-1^0)^3$

$[-11] + (-1^0)^3$

$[-11] + (-1)$

-12



Class/Homework

Mid Unit Review

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Questions

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