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Exponents and Roots Review

Simplify:

Example : 23 = 2 • 2 • 2 = 8

24 (-7)0 4-3

(-8)-2 11-2 (-2)5

Simplify: Leave your answer in exponent form.

105 • 101 52 • 5-5 (-2)5 ÷ (-2)2 38 ÷ 3-2

(21)4 (-53)-2 f6 ÷ f5 $\left(\frac{x^{8}}{x^{5}}\right)^{4}$

PEMDAS: Solve

8 – 6 • (3 + 2)2 (11 – 7)4 • (7 – 9)-2

List the two square roots of the following numbers:

$\sqrt{169}$ $\sqrt{\frac{36}{169} }$

Simplify the following expressions:

$\sqrt{100}+5$ $\sqrt{225}- \sqrt{9} $

Approximate each square root to the nearest 100th

$\sqrt{3}$ $\sqrt{150}$

Factor and simplify each square root. Leave answers with radical signs.

$\sqrt{20}$ $\sqrt{75}$

A chess board is a square grid of 64 smaller squares laid out in a 8 x 8 grid. If each of the smaller squares has an area of 4 sq inches, what is the length of one side of the complete chess board.

A professional boxing ring has an area of 400 square feet. Using the formula for area A = s2, calculate the length of one side of the ring, and the entire perimeter distance for the ring.