

Radicals and rational exponents

If $b^3 \cdot (b^4)^2 = b^x$, what is the value of x ?

A 9

B 11

C 18

D 19

$$\left(\frac{1}{2}\right)^{-2} + 3^0$$

What is the value of the expression above?

A $\frac{3}{4}$

B $\frac{5}{4}$

C 4

D 5

Radicals and rational exponents

$$\sqrt[3]{24v^3w^8}$$

Which of the following is equivalent to the expression above?

A $8w^5$

B $2vw^2\sqrt[3]{3}$

C $2vw^2\sqrt[3]{3w^2}$

D $8vw^2\sqrt[3]{3w^2}$

$$2\sqrt[3]{4} \cdot 2\sqrt[3]{2}$$

What is the value of the expression above?

A $2\sqrt[3]{6}$

B $4\sqrt[6]{8}$

C 8

D 16

Radicals and rational exponents

$$\left(\frac{64}{b^{27}}\right)^{-\frac{2}{3}}$$

Which of the following is equivalent to the expression above?

A $\frac{b^9}{16}$

B $\frac{b^{18}}{16}$

C $-\frac{128b^9}{3}$

D $-\frac{128b^{18}}{3}$
