

Objective #10

Factor expressions w/ rational exponents (page 1 of 2)

Select the factored form of the expression:

1. $4x^{1/6} + 16x^{19/6}$

[A] $4x^{1/6}(1+4x^3)$

[B] $4x^{1/6}(x-16x^{19/6})$

[C] $4x^{1/6}(1-4x^3)$

[D] $4x^{-1/6}(x+4x^3)$

→ What do they have in common?

$4x^{1/6}$

Factor
 $4x^{1/6}(1+4x^{18/6})^3$
||
 $4x^{1/6}(1+4x^3)$

2. $4x^{1/6} + 6x^{25/6} - 2x^{7/6}$

[A] $2x^{-1/6}(2-3x^4+x^{-4/3})$

[B] $2x^{1/6}(2+3x^4-x)$

[C] $2x^{1/6}(2-3x^4+x)$

[D] $2x^{-1/6}(2+3x^{-13/3}-x)$

→ What do they all have in common?

Factor!
 $2x^{1/6}$
 $2x^{1/6}(2+3x^{24/6}-x^{6/6})$
||
 $2x^{1/6}(2+3x^4-x)$