**Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Arithmetic with Polynomials and Rational Expressions (A.APR.1)**

Consider the polynomial expression:

$$x^{4}-8x^{2}+16$$

Select all expressions that are equivalent to the given expression.

|  |  |  |
| --- | --- | --- |
| Statement | Yes or No | Explain your thinking |
| 1. $(x^{2}-8)(x^{2}-2)$
 |  |  |
| 1. $(x^{2}-4)^{2}$
 |  |  |
| 1. $8-3x^{4}+x^{2}+4x^{4}+8-9x^{2}$
 |  |  |
| 1. $-(-16-8x^{2}-x^{4})$

  |  |  |
| 1. $\left(x^{3}+x\right)-\left(6x+2x\right)+16$
 |  |  |

Source:

<https://assessmentresource.org/wp-content/uploads/2019/07/High_School_Math_Fall_Block_Item_Set.pdf>

HS Math 2016 – Fall Block, Item VF905812