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

**Arithmetic with Polynomials and Rational Expressions (A.APR.2)**

Let $f\left(x\right)=2x^{2}-x+1$ and $g\left(x\right)=x-4$. Which statements are true?

Select all that apply.

|  |  |  |
| --- | --- | --- |
| Statement | Yes or No | Explain your thinking |
| 1. One root of $f(x)$ is -4.
 |  |  |
| 1. One root of $f(x)$ is 29.
 |  |  |
| 1. If $f(x)$ is divided by g$\left(x\right), $the remainder is 29.
 |  |  |
| 1. $g(x)$ is a factor of $f\left(x\right).$
 |  |  |
| 1. $g(x)$ is not a factor of $f\left(x\right).$
 |  |  |

Source:

<https://assessmentresource.org/wp-content/uploads/2019/07/Integrated_Math_3_EOY_Item_Set.pdf>

Integrated Math III EOY, Spring 2015, Item M40310