Solutions

Do Now Quiz - Find the zeros of a factored polynomial (A.APR.3)

1. Write down the solutions to the following polynomial equation

$$x(x-5)(x+2)=0$$

$x = 0, 5, -2$

2. Write down a polynomial function $f(x)$ with roots $x = 4, -3, 7$

$f(x) = (x-4)(x+3)(x-7)$

3. Given $f(x) = x(x+5)(x+1)(x-9)$. Select the true statements.
   a. $f(5) = 0$
   b. f has degree 3.
   c. One of the roots of f is 9.
   d. An ordered pair satisfying the equation is $(-1, 0)$
4. Early finishers: write a recursive definition of the sequence $a_1 = 5, a_2 = -15, a_3 = 45, \ldots$

$a_1 = 5$

$a_n = -3\, a_{n-1}$