Bellwork Alg 2 Friday, October 18, 2019

Find the y-intercept for each function.

1) $f(x) = 2x^2 + 3x - 8$

2) $f(x) = -2(x-1)^2 + 3$

3) $f(x) = -9x^4 + x^3 - 6x^2 + x + 3$

4) $f(x) = (2x-1)(5x+2)(x-9)$

5) $f(x) = 4x(2x-11)(6x+13)(7x-29)$

6) $f(x) = \dfrac{7x^2 + 4x - 8}{2x^3 - x^2 + 9x - 2}$

7) $f(x) = \dfrac{x^2 + 9x}{4x^2 + 3}$

8) $f(x) = \dfrac{8x^2 - 5x + 1}{7x^2 + 2x}$

Bellwork Alg 2 Friday, October 18, 2019

ANSWERS

Find the y-intercept for each function.

1) $f(x) = 2x^2 + 3x - 8$

$f(0) = 2(0)^2 + 3(0) - 8$

y-int = -8

2) $f(x) = -2(x-1)^2 + 3$

$f(0) = -2(0-1)^2 + 3$

$= -2(-1)^2 + 3$

$= -2(1) + 3$

$= -2 + 3$

y-int = 1

3) $f(x) = -9x^4 + x^3 - 6x^2 + x + 3$

$f(0) = -9(0)^4 + (0)^3 - 6(0)^2 + (0) + 3$

y-int = 3

4) $f(x) = (2x-1)(5x+2)(x-9)$

$f(0) = (2(0)-1)(5(0)+2)(0-9)$

$= (-1)(2)(-9)$

y-int = 18

5) $f(x) = 4x(2x-11)(6x+13)(7x-29)$

$f(0) = 4(0)(2(0)-11)(6(0)+13)(7(0)-29)$

$= 0(-11)(13)(-29)$

y-int = 0

6) $f(x) = \dfrac{7x^2 + 4x - 8}{2x^3 - x^2 + 9x - 2}$

$f(0) = \dfrac{7(0)^2 + 4(0) - 8}{2(0)^3 - (0)^2 + 9(0) - 2}$

$= \dfrac{-8}{-2}$

y-int = 4

7) $f(x) = \dfrac{x^2 + 9x}{4x^2 + 3}$

$f(0) = \dfrac{(0)^2 + 9(0)}{4(0)^2 + 3}$

$= \dfrac{0}{3}$

y-int = 0

8) $f(x) = \dfrac{8x^2 - 5x + 1}{7x^2 + 2x}$

$f(0) = \dfrac{8(0)^2 - 5(0) + 1}{7(0)^2 + 2(0)}$

$= \dfrac{1}{0} \Rightarrow$ undefined

NO y-int