

Advanced Algebra

Polynomials and the Intro to the Derivative Assignment #8

Either factor the given polynomial or multiply it out to general form.

1)  $y = x^3 + 12x^2 + 20x - 96$  has a given root at  $-6$

Final factored form answer

2)  $y = (x-5)(x-3)(x+4)$

Final general form answer

3)  $y = 2x^3 - 9x^2 - 50x - 48$  has a given root at  $-2$

Final factored form answer

4)  $y = x^3 + 0x^2 - 28x + 48$  has a given root at -6

Final factored form answer

5)  $y = (x-2)(x+4)(x-6)$

Final general form answer

6)  $y = 3x^3 + 16x^2 - 60x + 32$  has a given root at 2

Final factored form answer

7)  $y = (x-5)(x+8)(x-2)(x-4)$  hint: product of 2 binomials twice then 3 by 3 box

Final general form answer