

FAT: Converting Polynomials in -
HW#11 • factored form to Standard form
• Roots to factored form of least degree

Name: _____

Per: _____

Convert each polynomial to standard form. State the roots & y-int.

1. $y = (x-3)(x+2)(x-5)$

2. $y = 2(x+1)(x-4)(x-10)$

3. $y = (x-3i)(x+3i)(x+7)$

4. $y = (x+5i)(x-5i)(x-8)$

Write the polynomial equation of least degree ($a=1$) for each set of roots given.

5. $r_1 = 4$ $r_2 = -3$ $r_3 = 1$

6. $r_1 = 3$ $r_2 = .5$ $r_3 = 1$

7. $r_1 = (1+2i)$ $r_2 = (1-2i)$ $r_3 = 3$

8. $r_1 = 2i$ $r_2 = -2i$ $r_3 = -2$