

## Day 10 HW Answers

p. 380 #1-11 odd, 21

①  $x^3 + x^2 + 25x + 25 = 0$

③  $x^3 + 4x^2 + 6x + 4 = 0$

⑤  $-2i$

⑦  $1 + 2i$

⑨  $x = -1, 2, \pm 2i$

⑪  $x = 3 \pm i, \pm \sqrt{10}$

⑫  $x^4 - 2x^3 + 6x^2 - 8x + 8 = 0$

p. 380 # 8-12 even

⑧ possible rational roots:  $\pm(1, 2, 4, \frac{1}{2})$   
solutions:  $x = -1, 4, -\frac{1}{2}$

⑩ possible rational roots:  $\pm(1, 2, 4, \frac{1}{2}, \frac{1}{4})$   
solutions:  $x = \pm 2i, -\frac{1}{2} \text{ (dr)}$

⑫ possible rational roots:  $\pm(1, 2, \frac{1}{2}, \frac{1}{3}, \frac{2}{3}, \frac{1}{6})$   
solutions:  $x = \frac{1}{2}, \frac{2}{3}, \pm i$