P148-149 # 1-8, 13-21 odd, 27-30 OR

1. c
2. g
3. h
4. f
5. a
6. e
7. d
8. b

13. $f(x) = \frac{1}{3}x^3 + 5x$
falls left, rises right

15. $g(x) = 5 - \frac{7}{2}x - 3x^2$
falls left & right

17. $f(x) = -2.1x^5 + 4x^3 - 2$
rises left, falls right

19. $f(x) = 6 - 2x + 4x^2 - 5x^3$
rises left, falls right

21. $h(t) = -\frac{2}{5}(t^2 - 5t + 3)$
falls left & right

27. $f(x) = x^2 - 25$
   a. $0 = (x+5)(x-5)$
   $x = 5, x = -5$
   b. mult = 1 for both
   at most 1 turn
   c. Calc

(28) $f(x) = 49 - x^2 = -(x^2 - 49)$

(a) $0 = -(x+7)(x-7)$

$x = 7, -7$

(b) mult = 1
at most 1 turn

(c) calc ✓

(29) $h(t) = t^2 - 6t + 9 = (t-3)(t-3)$

(a) zero @ $t = 3$

(b) mult = 2
at most 1 turn

(c)

(30) $f(x) = x^2 + 10x + 25$

(a) $0 = (x+5)(x+5)$

(b) mult = 2
at most 1 turn

(c) calc