

# HALL 2 ch 6 part 1 Study Guide 2

$$a = x \quad b = 4$$

$$1. x(2x+1)(2x-3)$$

$$2. (x+4)(x^2-4x+16)$$

$$a = 2x \quad b = 1$$

$$3. (2x-1)(4x^2+2x+1)$$

$$4. (x^2-1)(x^2-9)$$

$$5. 2(x^2+1)(2x^2-3)$$

$$6. x^3+x^2-8x-12$$

$$(x+1)(x-1)(x+3)(x-3)$$

cubic

polynomial

$$7. 4x^5+4x^4+x^3$$

quintic  
trinomial

$$8. x^3-x^2+9x-9$$

cubic  
polynomial

$$9. x=0$$

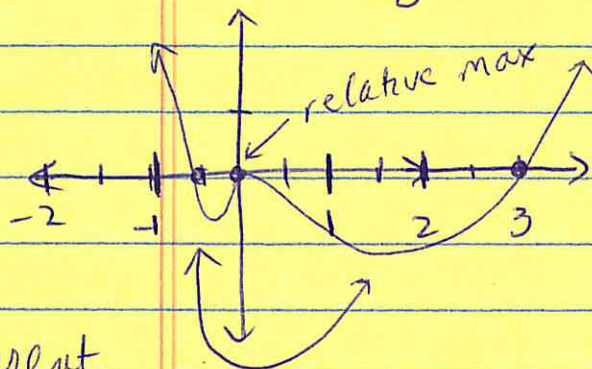
$x=-2$  multiplicity 2

$x=5$

$$10. x=0 \text{ multiplicity } 2$$

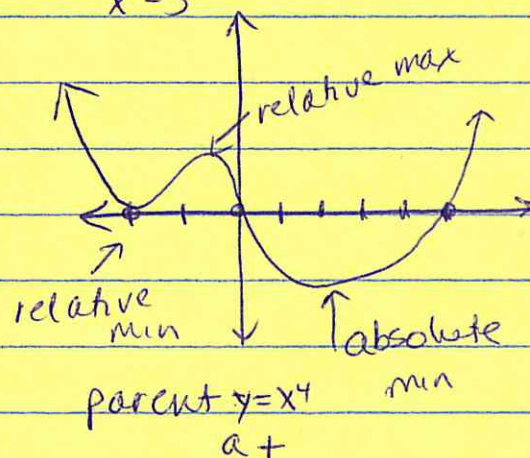
$$x=-\frac{1}{2}$$

$$x=3 \text{ multiplicity } 3$$



parent  
 $y = x^6$   
a+

one of these is a  
relative min., one is an  
absolute min



parent  $y = x^4$   
a+

$$11. x=0$$

$$x=1.536$$

$$x=8.464$$

$$12. x=.825$$

$$x=1.709$$

(2 other  
solutions  
are  
imaginary)