NAME:

QUADRATIC KEY TERMS

CUT AND PASTE THE BOXES AND PLACE THEM NEXT TO THE CORRECT PROBLEM.

PROBLEM	FACTORS	VERTEX & MAX/MIN	ROXS	Y-INTERCEPT	AXIS OF SYMMETRY
$f(x) = x^2 - 12x + 36$	$(x - 6)^2$				
$f(x) = 3x^2 - 3$		(0, -3) Maximum or Minimum			x = 0
$f(x) = -x^2 + 4x + 5$			(5, 0) & (-1, 0)		
$f(x) = 2x^2 + 8x + 6$				(0, 6)	

PROBLEM	FACTORS	VERTEX & MAX/MIN	ROXS	Y-INTERCEPT	AXIS OF SYMMETRY
$f(x) = x^2 + 6x - 27$	$(x - 3)(x + 9)$				$x = -3$
$f(x) = -x^2 - 6x - 8$		$(-3, 1)$ Maximum or Minimum			
$f(x) = x^2 - 4$			$(2, 0)$ & $(-2, 0)$		
$f(x) = 3x^2 + 12$				$(0, 12)$	

1 $(x + 2)(x - 2)$	**2** $-(x + 1)(x - 5)$	**3** $3(x^2 + 4)$	**4** $-(x + 2)(x + 4)$	**5** $3(x + 1)(x - 1)$	**6** $2(x + 1)(x + 3)$
7 (-2, -2) Maximum or Minimum	**8** (0, 12) Maximum or Minimum	**9** (2, 9) Maximum or Minimum	**10** (-3, -36) Maximum or Minimum	**11** (6 , 0) Maximum or Minimum	**12** (0, -4) Maximum or Minimum
13 (0, -27)	**14** (0, -3)	**15** (6, 0)	**16** (-1, 0) & (-3, 0)	**17** (0, 36)	**18** (3, 0) & (-9, 0)
19 (0, 5)	**20** (1, 0) & (-1, 0)	**21** (0, -4)	**22** None	**23** (-2, 0) & (-4, 0)	**24** (0, -8)
25 x = 2	**26** x = 0	**27** x = 6	**28** x = -2	**29** x = 0	**30** x = -3