DIRECTIONS: SHOW YOUR WORK. CIRCLE YOUR FINAL ANSWERS

1. (20 points) Factor each completely.

(a) 
$$8x^2 - 8x - 30$$

(b) 
$$12x^2 + 20x + 8$$

(c) 
$$4x^2 + 2x - 20$$

(d) 
$$5x^2 + 27x - 18$$

(e) 
$$24x^2 + 56x + 30$$

(f) 
$$12x^2 + 8x - 15$$

## Key:

- 1. 2(2x-5)(2x+3)
- 2. 4(x+1)(3x+2)
- 3. 2(x-2)(2x+5)
- 4. (x+6)(5x-3)
- 5. 2(2x+3)(6x+5)
- 6. (2x+3)(6x-5)