

$$1-1) T(n) = \Theta(n^2) \text{ case 3}$$

n/a  
master's theorem  
does not apply

$$1-2) T(n) = \Theta(n \lg^7 n) \text{ (C1)}$$

$$1-16) T(n) = \Theta(n^{1/2} \lg n) \text{ C2}$$

$$1-3) T(n) = \Theta(n^2 \lg n) \text{ (C2)}$$

$$1-17) T(n) = \Theta(n^{0.51}) \text{ C3}$$

$$1-4) T(n) = \Theta(n \lg n) \text{ (C3)}$$

$$1-18) T(n) = \Theta(n) \text{ C3}$$

$$1-5) T(n) = \Theta(n^2) \text{ (C1)}$$

1-6) n/a master's theorem does  
not apply (Iteration might give  $\Theta(n^2)$ )

$$1-7) T(n) = \Theta(n^2 \lg^2 n) \text{ extended case 2}$$

$$1-8) T(n) = \Theta(n \lg^5 n) \text{ case 1}$$

$$1-9) T(n) = \Theta(n^2)$$

master's theorem  
does not apply

$$1-10) T(n) = \Theta(n^{1/2}) \text{ (C1)}$$

$$1-11) T(n) = \lg^2 n \text{ (C2)}$$

1-12) master's theorem does not  
apply C.R. would be  $T(n) = \Theta(n^2)$

$$1-13) T(n) = \Theta(n^{1/2}) \text{ (C1)}$$

$$1-14) T(n) = \Theta(n \lg^2 n) \text{ (C2)}$$