Class work: Recurrences

What are the solutions to the following recurrences?

1. $T(n) = T(n/3) + \Theta(1)$

2. $T(n) = T(n/5) + \Theta(1)$

3. $T(n) = T(n/10) + \Theta(1)$

4. $T(n) = T(2n/3) + \Theta(1)$

5. $T(n) = T(99n/100) + \Theta(1)$

6. $T(n) = T(n/3) + \Theta(n)$

7. $T(n) = T(n/4) + \Theta(n)$

8. $T(n) = T(n/3) + T(n/4) + \Theta(n)$

9. $T(n) = T(n/2) + T(n/4) + T(n/10) + \Theta(n)$

10. $T(n) = T(n-2) + \Theta(n)$

11. $T(n) = 3T(n/3) + \Theta(n)$

12. $T(n) = 5T(n/5) + \Theta(n)$

13. $T(n) = T(n/3) + T(2n/3) + \Theta(n)$

14. $T(n) = 1 + T(n-2)$

15. $T(n) = 1 + T(n-3)$

16. $T(n) = 2T(n-1) + \Theta(1)$