

HW #11 Final Answers

1. Converges

2. Diverges

3. Converges

4. Diverges

5. Converges Sum = 2

6. Converges Sum = 10

7. Converges Sum = $\frac{36}{5}$

8. Diverges

9. Converges Sum = $\frac{-192}{43}$

10. Diverges

11. Converges Sum = $\frac{5}{2}$

12. Converges Sum = $\frac{1999}{1998}$

13. Diverges

14. Diverges

15. Diverges

16. Diverges

17. Diverges

18. Converges for $-\frac{1}{5} < x < \frac{1}{5}$ with Sum = $\frac{-5x}{1+5x}$

19. Converges for $-1 < x < 5$ with Sum = $\frac{3}{5-x}$