$$\sum_{n=1}^{\infty} (-1)^n \frac{5n}{\sqrt{n^9}}$$

1

$$\sum_{n=2}^{\infty} \frac{1}{n \ln(n)}$$

6

$$\sum_{n=1}^{\infty} \frac{n^2}{5^n}$$

11

$$\sum_{n=1}^{\infty} \frac{6}{5^n}$$

2

$$\sum_{n=1}^{\infty} \left[\frac{3}{3n+1} - \frac{3}{3n+4} \right]$$

7

$$\sum_{n=1}^{\infty} \frac{(-1)^n n}{n+2}$$

12

$$\sum_{n=0}^{\infty} \frac{6}{5^n}$$

3

$$\sum_{n=1}^{\infty} \frac{1 + \cos^2(n)}{n^{2/3}}$$

8

$$\sum_{n=1}^{\infty} \ln\left(\frac{n}{n+1} \right)$$

13

$$\sum_{n=0}^{\infty} \left(\frac{6}{5} \right)^n$$

4

$$\sum_{n=1}^{\infty} \left[1 + (-1)^n \right]$$

9

$$\sum_{n=1}^{\infty} \frac{2^n + \frac{1}{n}}{3^n + \frac{1}{3^n}}$$

14

$$\sum_{n=1}^{\infty} \frac{n}{(n^2+1)^3}$$

5

$$\sum_{n=4}^{\infty} \frac{(-1)^n}{\sqrt{n}}$$

10

$$\sum_{n=1}^{\infty} \left[\ln(n) - \ln(n+1) \right]$$

15

Converges absolutely $\quad\alpha$	Diverges $\quad\delta$	Converges $\quad\beta$
Converges to $\dfrac{3}{2}$ $\quad\omega$	Converges to $\dfrac{3}{4}$ $\quad\xi$	Diverges $\quad\delta$
Converges to $\dfrac{15}{2}$ $\quad\phi$	Diverges $\quad\delta$	Diverges $\quad\delta$
Diverges $\quad\delta$	Diverges $\quad\delta$	Converges $\quad\beta$
Converges $\quad\beta$	Converges conditionally $\quad\zeta$	Diverges $\quad\delta$

p-series test and definition of absolute convergence ÷	Integral test &	Ratio test ?
Geometric series test ★	Telescoping series @	Divergence test !
Geometric series test ★	Comparison test and *p*-series test □	Telescoping series @
Divergence test or Geometric Series Test △	Divergence test !	Limit comparison test and geometric series test ♡
Integral test or Comparison Test or Limit Comparison Test ∞	Alternating series test and *p*-series test %	Telescoping series @

$$-5 + \frac{10}{2^{9/2}} - \frac{15}{3^{9/2}} + \cdots$$

I

$$\frac{1}{2\ln(2)} + \frac{1}{3\ln(3)} + \frac{1}{4\ln(4)} + \cdots$$

A

$$\frac{1}{5} + \frac{4}{25} + \frac{9}{125} + \cdots$$

C

$$\frac{6}{5} + \frac{6}{25} + \frac{6}{125} + \cdots$$

E

$$\frac{9}{28} + \frac{9}{70} + \frac{9}{130} + \cdots$$

M

$$-\frac{1}{3} + \frac{1}{2} - \frac{3}{5} + \cdots$$

H

$$6 + \frac{6}{5} + \frac{6}{25} + \cdots$$

O

$$1 + \cos^2(1) + \frac{1 + \cos^2(2)}{\sqrt[3]{4}} + \frac{1 + \cos^2(3)}{\sqrt[3]{9}} + \cdots$$

N

$$-\ln(2) + (\ln(2) - \ln(3)) + (\ln(3) - \ln(4)) + \cdots$$

B

$$1 + \frac{6}{5} + \frac{36}{25} + \cdots$$

D

$$0 + 2 + 0 + \cdots$$

J

$$\frac{9}{10} + \frac{81}{164} + \frac{45}{146} + \cdots$$

G

$$\frac{1}{8} + \frac{2}{125} + \frac{3}{1000} + \cdots$$

F

$$\frac{1}{2} - \frac{1}{\sqrt{5}} + \frac{1}{\sqrt{6}} - \cdots$$

K

$$-\ln(2) + (\ln(2) - \ln(3)) + (\ln(3) - \ln(4)) + \cdots$$

B