

## 방과후 퀴즈 11.2-11.4

6문제, 15분

2025.11.4.화

1. Write the theorem of **integral test**, **direct comparison test**, **limit comparison test**.

**integral test**

**direct comparison tes**

**limit comparison test**

2. Determine whether the series is coneverges or diverges.

$$\sum_{n=1}^{\infty} \frac{\sqrt{n+1} - \sqrt{n-1}}{n}$$

3. Determine whether the series is converges or diverges.

$$\sum_{n=1}^{\infty} \frac{1}{n\sqrt{\ln n}}$$

4. Determine whether the series is converges or diverges.

$$\sum_{n=1}^{\infty} \ln\left(\frac{n}{3n+1}\right)$$

5. Determine whether the series is converges or diverges.

$$\sum_{n=1}^{\infty} n^2 e^{-n^3}$$

6. Determine whether the series is converges or diverges.

$$\sum_{n=1}^{\infty} \sin^2\left(\frac{1}{n}\right)$$