

pdfs/admin_set

$$4. a) \sum_{n=1}^{\infty} \frac{\operatorname{arctg}^2 n}{n^3};$$

$$b) \sum_{n=1}^{\infty} \frac{1}{\sqrt{n+1}} \operatorname{arctg} \frac{1}{\sqrt[3]{n+1}};$$

$$3. a) \sum_{n=1}^{\infty} \frac{\sin n\sqrt{n}}{n\sqrt{n}};$$

$$b) \sum_{n=1}^{\infty} \frac{1}{\sqrt{n+1}} \sin \frac{1}{n+2};$$

$$5. a) \sum_{n=1}^{\infty} \frac{1}{\sqrt{n^3 + 5n}};$$

$$b) \sum_{n=1}^{\infty} \left(e^{\frac{3}{n}} - 1 \right);$$

$$6. a) \sum_{n=1}^{\infty} \frac{1}{\sqrt{(n+5)n}};$$

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

$$7. a) \sum_{n=1}^{\infty} \frac{2 - \sin n}{(n+1)(n+2)};$$

$$b) \sum_{n=1}^{\infty} \left(1 - \cos \frac{\pi}{n} \right);$$