

$$4) x_n = \frac{2n^3 + 6n}{3n^3 + 1}$$

$$5) y_n = \frac{(-1)^n}{n^2}$$

$$6) z_n = n^2 + \cos(n)$$

$$7) a_n = \left(\frac{\pi}{2}\right)^n$$

$$8) b_n = 7 - \left(\frac{2}{3}\right)^n$$