

Answers 9.3 Part 1 P. 635(6-38e)

(6) Not geom (tell why)

(8) Geom $r = -1/3$ (show)

(10) Geom $r = 1/5$ or 2 (Show)

(12) Geom $r = 2/\sqrt{3}$ (Show) or $\frac{2\sqrt{3}}{3}$

(14) 7, 28, 112, 448, 1792

(16) 6, $-3/2$, $3/8$, $-3/32$, $3/128$

(18) 2, 2π , $2\pi^2$, $2\pi^3$, $2\pi^4$

(20) 4, $-2\sqrt{2}$, 2, $-\sqrt{2}$, 1

(22) 4, $4x/5$, $4x^2/25$, $4x^3/125$, $4x^4/625$

(24) $a_n = 5 \left(\frac{7}{5}\right)^{n-1}$

$$a_8 = \frac{4,117,715}{128}$$

(26) $a_n = 64 \left(-\frac{1}{4}\right)^{n-1}$ $a_{10} = -\frac{1}{4096}$

(28) $a_n = (e^{-x})^{n-1}$ or $e^{-x(n-1)}$ $a_4 = e^{-3x}$

(30) $a_n = (\sqrt{3})^{n-1}$ $a_8 = 27\sqrt{3}$

(32) $a_n = 1000(1.005)^{n-1}$ $a_{60} = 1342.139$

(34) $a_n = \cancel{64 \left(\frac{1}{2}\right)^{n-1}} = 81 \left(\frac{1}{3}\right)^{n-1}$

(36) $a_n = \cancel{9 \left(\frac{1}{2}\right)^{n-1}} = 5(-2)^{n-1}$

(38) $a_n = 80 \left(-\frac{1}{2}\right)^{n-1}$