

Trabalho 3 - Gabriela Sperotto

$$1. a_1 = 1 \quad a_{50} = a_1 + 49r \quad S_n = \frac{(a_1 + a_n)n}{2}$$

$$a_2 = 5 \quad a_{50} = 1 + 49 \cdot 4$$

$$a_{50} = 197 \quad S_n = \frac{(1 + 197)50}{2}$$

$$R = a_2 - a_1$$

$$R = 5 - 1$$

$$R = 4$$

$$S_n = 9900/2$$

$$S_n = 4950$$

certo

R: A soma dos cinquenta primeiros termos é igual a 4950

2 - 10 - - - - 220 P.A. = 10, 45, 80, 115, 150, 185, 220

$$a_n = a_1 + (n-1) \cdot R$$

$$220 = 10 + (7-1)R$$

$$220 - 10 = 6R$$

$$6R = 210$$

$$R = \frac{210}{6}$$

$$R = 35$$

certo

$$3 - a_1 = x + 1$$

$$a_2 = x + 11$$

$$a_3 = x + 41$$

$$a_2 = a_3$$

$$a_1 \quad a_2$$

$$x + 11 = x + 41$$

$$x + 1 \quad x + 11$$

$$x^2 + 22x + 121 = x^2 + 42x + 41$$

$$22x - 42x = 41 - 121$$

$$-20x = -80$$

$$x = \frac{-80}{-20}$$

$$x = 4$$

certo

$$4 + 11 = 4 + 41$$

$$4 + 1 \quad 4 + 11$$

$$\frac{15}{5} = \frac{45}{15} \leadsto 3 = 3$$

$$(5, 15, 45)$$

$$4. a_1 = \frac{1}{3}$$

$$a_2 = \frac{1}{9}$$

$$a_3 = \frac{1}{27}$$

$$\frac{a_2}{a_1} = q$$

$$\frac{1/9}{1/3} = q$$

$$\frac{1/9}{1/3} = q$$

$$\frac{1 \cdot 3}{9 \cdot 1} = \frac{3}{9}$$

$$\frac{1-9}{1 \cdot 9} = \frac{9-3}{9 \cdot 9} = \frac{6}{9}$$

$$S_n = \frac{a_1}{1-q}$$

$$S_n = \frac{1/3}{1-3/9}$$

$$S_n = \frac{1 \cdot 9}{3 \cdot 6} = \frac{9}{18} = \frac{3}{6}$$

certo

Questão 5???