Desafio 2 Octave

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21. The circumference of an ellipse can be approximated by:

$$C = \pi[3(a + b) - \sqrt{(3a + b)(a + 3b)}]$$

Calculate the circumference of an ellipse with a = 16 in. and b = 11 in.

$$C = \pi[3(16 + 11) - \sqrt{(3*16 + 11)(16 + 3*11)}] = 3.423$$

Separando en dos operaciones:

$$e1 = 3(16 + 11) = 81$$

$$e2 = \sqrt{(3*16 + 11)(16 + 3*11)} = 53.768$$

$$c = \pi(e1 - e2)$$

Resultado:

$$c = \pi(81 - 53.768) = 85.552$$