FA Module 9 Capitalized interest practice exam questions

(The attached PDF file has better formatting.)

On January 1, 20XX, a firm has 200 of shareholders' equity, 200 of cash, and no other assets or liabilities. It takes a one year loan for 389 at a 6% coupon rate, and it pays the 389 to a contractor to construct a home office, which is completed by December 31, 20XX. The home office has a 6 year useful life and no salvage value, and the firm uses straight line depreciation. The firm has no other revenue or expenses in 20XX.

Question 9.1: Financial leverage

If the firm expenses the interest costs of the loan, what is its financial leverage on December 31, 20XX?

Answer 9.1: (200 + 389 – 389 × 6%) / (200 – 389 × 6%) = 3.20

(Initial assets + carrying value of home office – interest expense) / (initial equity – interest expense)

Question 9.2: Depreciation

If the firm expenses the interest costs of the construction loan, what is the depreciation on the home office in 20XX+1?

Answer 9.2: 389 / 6 = 64.83

(depreciation = purchase price / estimated useful life)

Question 9.3: Financial leverage with capitalized interest

If the firm capitalizes the interest costs of the loan, what is its financial leverage on December 31, 20XX?

Answer 9.3: (200 + 389) / (200) = 2.95

(financial leverage = assets / shareholders' equity =
(Initial assets + carrying value of home office + capitalized interest – interest expense) / (initial equity) )

Question 9.4: Depreciation with capitalized interest

If the firm capitalizes the interest costs of the construction loan, what is the depreciation on the home office in 20XX+1?

Answer 9.4: (389 + 23.34) / 6 = 68.72

(depreciation = (purchase price + capitalized interest) / estimated useful life)