

FA Module 7 Diluted EPS for stock options reverse practice exam questions

(The attached PDF file has better formatting.)

In 20XX, a firm has 410 common shares outstanding and 53 executive stock options outstanding.

The average stock price during 20XX is 117, and the firm pays shareholder dividends of 4 per share. The corporate tax rate is 10%. In 20XX, the firm's

- Basic earnings per share = 4.2683
- Diluted earnings per share = 4.1447

The firm has no dilutive securities besides the executive stock options.

Question 7.1: Net income and diluted earnings per share

What is the firm's net income?

Answer 7.1: $410 \times 4.2683 = 1,750.00$

(net income = weighted average shares outstanding $\times$ basic earnings per share)

Question 7.2: Treasury stock method numerator

What is the numerator of the diluted EPS ratio using the Treasury stock method?

Answer 7.2: 1,750

Question 7.3: Treasury stock method denominator

What is the denominator of the diluted EPS ratio using the Treasury stock method?

Answer 7.3: $1,750 / 4.1447 = 422.2260$

(denominator = numerator / diluted earnings per share)

Question 7.4: Shares added

How many shares are added by exercise of the stock options minus repurchase of shares in the Treasury stock method?

Answer 7.4: $422.23 - 410 = 12.23$

Question 7.5: Shares repurchased

How many shares are repurchased in the Treasury stock method?

Answer 7.5: $53 - 12.23 = 40.77$

(Stock options exercised – additional shares)

Question 7.6: Cash used to exercise the stock options

How much cash was used to exercise the stock options in the Treasury stock method?

Answer 7.6: $40.77 \times 117 = 4,770.09$

(average stock price $\times$ additional shares)

Question 7.7: Exercise price of stock options

What is the exercise price of the stock options?

Answer 7.7: $4,770.09 / 53 = 90.00$

(cash used to exercise the stock options / number of stock options)