Problem 19-12

On December 31, 2020, Dow Steel Corporation had 600,000 shares of common stock and 300,000 shares of 8%, noncumulative, nonconvertible preferred stock issued and outstanding. Dow issued a 4% common stock dividend on May 15, and paid cash dividends of $400,000 and $75,000 to common and preferred shareholders, respectively, on December 15, 2021. On February 28, 2021, Dow sold 60,000 common shares. In keeping with its long-term share repurchase plan, 2,000 shares were retired on July 1. Dow’s net income for the year ended December 31, 2021, was $2,100,000. The income tax rate is 25%.

As part of an incentive compensation plan, Dow granted incentive stock options to division managers at December 31 of the current and each of the previous two years. Each option permits its holder to buy one share of common stock at an exercise price equal to the market value at the date of grant, and can be exercised one year from that date.

Information concerning the number of options granted and common share prices follows:

<table>
<thead>
<tr>
<th>Date Granted</th>
<th>Options Granted</th>
<th>Share Price (adjusted for stock dividend)</th>
</tr>
</thead>
<tbody>
<tr>
<td>12/31/19</td>
<td>8,000</td>
<td>$24</td>
</tr>
<tr>
<td>12/31/20</td>
<td>3,000</td>
<td>$33</td>
</tr>
<tr>
<td>12/31/21</td>
<td>6,500</td>
<td>$32</td>
</tr>
</tbody>
</table>

The market price of the common stock averaged $32 per share during 2021.

Compute Dow’s earnings per share for the year ended December 31, 2021.

Problem 19-12 (continued)

Numerator (Basic EPS): Net income = $2,100,000; Preferred dividends = $75,000 (because the preferred stock is noncumulative, only include the dividends that are actually paid).

Denominator (Basic EPS): Weighted average # shares of common stock outstanding.

1/1 – 12/31: $600,000 x (12/12) = 600,000 x 1.04 = 624,000
2/28 – 12/31: $600,000 x (10/12) = 50,000 x 1.04 = 52,000
7/1 – 12/31: (2,000) x (6/12) = (1,000)

Weighted average # shares = 675,000

Basic EPS = ($2,100,000 - $75,000) / 675,000 = $3.00
Problem 19-12 (continued)

Stock Options: Use the Treasury Stock Method if dilutive.
8,000 options issued 12/31/19 with exercise price of $24.
1. Are they dilutive? Yes because the exercise price of $24 <
market price of $32. Assume exercise at the later of the date of
issue (12/31/19) or the beginning of the year (1/1/21).
2. Proceeds received upon exercise ($24 x 8,000) = $192,000
3. Shares repurchased at current market price = 6,000 ($192,000
+ $32)
4. Net increase in # shares = 2,000 (8,000 – 6,000)
3,000 options issued 12/31/20 with exercise price of $33.
1. Are they dilutive? No because the exercise price $33 is not
less than the market price of $32. Therefore, ignore.
6,500 options issued 12/31/21 with exercise price of $32.
1. Are they dilutive? No because the exercise price of $32 is not
less than the market price of $32. Therefore, ignore.

Problem 19-12 (continued)

Basic EPS = ($2,100,000 - $75,000) / 675,000 = $3.00
Diluted EPS = ($2,100,000 - $75,000) / (675,000 + 2,000) = $2.99