Calculating Income: Camp Sawyer Grove

March 1, 1901

Here are the scaler's notes for the board feet of timber that we have cut in the first four months of camp. You need to determine if we are on track to reach our goal of 6 million board feet by March 31st. Remember to show your work so I can check it.

—Foreman

<table>
<thead>
<tr>
<th>Month</th>
<th>Days in month</th>
<th>Sundays (days off)</th>
<th>Work days in month</th>
<th>Board Feet (BF) of timber</th>
</tr>
</thead>
<tbody>
<tr>
<td>November</td>
<td>30</td>
<td>4</td>
<td>26</td>
<td>1,166,012</td>
</tr>
<tr>
<td>December</td>
<td>31</td>
<td>6</td>
<td>25</td>
<td>1,220,986</td>
</tr>
<tr>
<td>January</td>
<td>31</td>
<td>4</td>
<td>27</td>
<td>1,264,782</td>
</tr>
<tr>
<td>February</td>
<td>28</td>
<td>4</td>
<td>24</td>
<td>1,186,240</td>
</tr>
<tr>
<td>March</td>
<td>31</td>
<td>4</td>
<td>27</td>
<td></td>
</tr>
</tbody>
</table>

How many board feet have we cut as of February 28th?

**4,838,020 BF**

What is the average number of board feet of timber that we are cutting each day? Round your answer to the nearest whole number.

\[
\text{(total board feet)} \div \text{(total work days)}
\]

\[
4,838,020 \text{ BF} \div 102 \text{ days} \approx 47,431.57 \text{ rounds to } 47,432 \text{ BF per day}
\]

Are we on track to cut 6,000,000 BF by March 31st? (Show your work.)

\[
(\text{days left to work}) \times (\text{average BF cut per day})
\]

\[
27 \times 47,432 = 1,280,664 \text{ BF in March}
\]

1,280,664 BF + 4,838,020 BF = 6,118,684 BF

**Yes!**

How many board feet of timber is the camp projected to cut if our jacks also work on Sundays in March? Will the goal be met? By how much?

\[
(\text{days left to work} + 4 \text{ Sundays in March}) \times (\text{average BF cut per day})
\]

\[
(27 + 4) \times 47,432 = (31) \times 47,432 = 1,470,392 \text{ BF in March}
\]

1,470,392 BF + 4,838,020 BF = 6,308,412 BF

**Yes, with 308,412 extra board feet**