

Troubleshooting

Find the error and correct it!

Identify the error and provide a correction:

Tyler was just named treasurer of the community college baseball team. He was trying to straighten out some of the accounting and wanted, ultimately, to determine the revenue for the 2013 season, when 8,000 home game tickets were sold. He also knew, based on records from the booster club, that they had donated \$10,000 in 2013. Looking back, he found that in 2012, the revenue for the team was \$14,000 (the sum of gifts from its booster club and ticket sales from home games). Tickets for home games are always sold at \$4.00 each.

Step	Tyler's Work															
1. Read and state the problem	What is the revenue for 2013?															
2. Inventory the information	<table border="0"> <thead> <tr> <th>Given</th> <th>Missing</th> <th>Find</th> </tr> </thead> <tbody> <tr> <td>Revenue in 2012 was \$14000</td> <td>Number of tickets sold in 2012</td> <td>Revenue for the 2013 season</td> </tr> <tr> <td>In 2013, the booster club gave \$10,000</td> <td></td> <td></td> </tr> <tr> <td>In 2013, 8000 tickets were sold</td> <td>Booster club donations in 2012</td> <td></td> </tr> <tr> <td>Tickets cost \$4.00</td> <td></td> <td></td> </tr> </tbody> </table>	Given	Missing	Find	Revenue in 2012 was \$14000	Number of tickets sold in 2012	Revenue for the 2013 season	In 2013, the booster club gave \$10,000			In 2013, 8000 tickets were sold	Booster club donations in 2012		Tickets cost \$4.00		
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In 2013, the booster club gave \$10,000																
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3. Eliminate irrelevant information	Revenue in 2012 was \$14000 In 2013, the booster club gave \$5000 In 2013, 8000 tickets were sold Tickets cost \$4.00															
4. Identify variables, constants and assumptions	Rt = the revenue in dollars for the number of tickets sold R = total revenue t = number of tickets sold 4 = ticket cost in dollars $\$10000$ = booster club donation 8000 = tickets sold															
5. Determine the form for the solution	How much of the revenue comes from ticket sales? What is the revenue in dollars if 8000 tickets are sold?															
6. Simplify the problem	1) The revenue from tickets sales is the price of each ticket times the number of tickets sold. 2) The total revenue is revenue from ticket sales minus the booster donation.															
7. Model each sub-problem	1) The revenue from tickets sales is the price of each ticket times t tickets: $Rt = 4 \times t$ 2) The total revenue is the revenue from ticket sales minus booster gifts: $R = Rt - 10000$															
8. Integrate the sub-problems	1) $Rt = 4 \times t = 4 \times 8000 = \mathbf{32000}$ 2) $R = Rt - 10000$ $R = 32000 - 10000$ $R = \mathbf{22000}$															
9. Present the solution	The revenue for the club was \$22,000.															

ERROR

CORRECTION