Graduation Numeracy Assessment Video Series

Giving Out Bonuses Situation and Questions
November 2017

BRITISH COLUMBIA | Ministry of Education

TEXT 'N' TALK

keeping you in touch!

Attention Sales Team Members!

Thanks to your hard work, TEXT 'N' TALK is becoming the nation's fastest growing mobile communications provider.

To show you how much we appreciate the work you do, we're announcing two different bonuses to the members of our sales teams who sold the most phones.

To be considered for these bonuses add your sales figures for April to the chart below!

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Sales Report

Sales Person	Team	Number of Phones Sold for the Month of April (30 days)
Tyson	A	300 phones sold this month.
PETER	B	An average of 56 phones sold every 5 days.
Lewis	A	An average of 10 1/3 phones sold each day.
AINSLEY	A	598 phones sold in the last 60 days
Avery	A	An average of 98.25 phones sold every 10 days.
Jennifer	B	an average of 11 4/15 phones sold each day! ☺
STEVEN	B	Average: 55 phones/week
Gabrielle	C	4113 phones sold last year.
Diana	C	Average of 10.05 phones per day.
MATTHEW	D	AN AVERAGE OF 10.87 PHONES EACH DAY
Alexa	D	Average 9 1/6 phones each day.
Jasmine	C	267 phones this month.

You are the manager at Text 'N' Talk. April has just ended and you need to determine how to fairly distribute the bonuses.

1. What questions do you need to ask in order to make a decision about who gets the bonuses?

   Select all that apply.

   - [ ] How much do the phones cost?
   - [ ] How many hours did each sales person work per week?
   - [ ] Can a sales person get both the individual and the team bonus?
   - [ ] Did each sales person accurately report the number of phones sold?
   - [ ] What is the average length of employment of each sales person at Text 'N' Talk?

2. You decide to do the following computation with Steven's Sales Report: $\frac{55}{7}$. What are you calculating?

   - ( ) The average number of phones he sold in 1 day.
   - ( ) The average number of phones he sold in 1 week.
   - ( ) The average number of phones he sold in 1 month (April).
   - ( ) The average number of phones he sold in 1 year.

3. Of Ainsley, Avery, Diana and Jasmine, which sales person sold the most phones in April?

   - ( ) Ainsley
   - ( ) Avery
   - ( ) Diana
   - ( ) Jasmine

4. You calculate April phone sales from the information your sales team members provided. Gabrielle reports 4113 phones sold in the last year. You decide that the fair way to calculate Gabrielle's April phone sales is to divide this number by 12, giving her 342.75, or approximately 343 phones sold.

   Why might some of your sales team members disagree with your approach?

   Select all that apply.

   - ☐ Gabrielle could not have sold 343 phones in April.
   - ☐ Gabrielle likely did not sell the same number of phones each month throughout the year.
   - ☐ Gabrielle is the only sales team member whose April phone sales were calculated by averaging.
   - ☐ Gabrielle's phone sales could be calculated by dividing 4113 by 365 days and multiplying by 30 days.

(Student-Choice Question)

5. Which sales team should get the bonus?

   Explain and justify your solution.