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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1. Consider the following set of data:   |  |  | | --- | --- | | **x** | **y** | | 1 | 13.08 | | 2 | 20.97 | | 3 | 28.86 | | 4 | 36.75 | | 5 | 44.64 | | 6 | 52.53 | | | |  |  | | --- | --- | | **Ratios** | | | Of 1st and 2nd terms |  | | Of 2nd and 3rd terms |  | | Of 3rd and 4th terms |  | | Of 4th and 5th terms |  | | Of 5th and 6th terms |  |   Fill out the following table:   |  |  | | --- | --- | | **Differences** | | | Between 1st and 2nd terms |  | | Between 2nd and 3rd terms |  | | Between 3rd and 4th terms |  | | Between 4th and 5th terms |  | | Between 5th and 6th terms |  | | | |
| 2. Would the data best be modeled by a linear function or an exponential function? How do you know? | | | | |
| 3. Write a recursive formula for the data: | | | 4. Write an explicit formula for the data: | |
| 5. Consider the following set of data:   |  |  | | --- | --- | | **x** | **y** | | 1 | 7.3 | | 2 | 8.76 | | 3 | 10.512 | | 4 | 12.614 | | 5 | 15.137 | | 6 | 18.165 | | Fill out the following table:   |  |  | | --- | --- | | **Differences** | | | Between 1st and 2nd terms |  | | Between 2nd and 3rd terms |  | | Between 3rd and 4th terms |  | | Between 4th and 5th terms |  | | Between 5th and 6th terms |  |  |  |  | | --- | --- | | **Ratios** | | | Of 1st and 2nd terms |  | | Of 2nd and 3rd terms |  | | Of 3rd and 4th terms |  | | Of 4th and 5th terms |  | | Of 5th and 6th terms |  | | | | |
| 6. Would the data best be modeled by a linear function or an exponential function? How do you know? | | | | |
| 7. Write a recursive formula for the data: | | | | 8. Write an explicit formula for the data: |
| 9. Consider the following set of data:   |  |  | | --- | --- | | **x** | **y** | | 1 | 180 | | 2 | 135 | | 3 | 94.5 | | 4 | 68.99 | | 5 | 51.05 | | 6 | 36.76 | | | |  |  | | --- | --- | | **Ratios** | | | Of 1st and 2nd terms |  | | Of 2nd and 3rd terms |  | | Of 3rd and 4th terms |  | | Of 4th and 5th terms |  | | Of 5th and 6th terms |  |   Fill out the following table:   |  |  | | --- | --- | | **Differences** | | | Between 1st and 2nd terms |  | | Between 2nd and 3rd terms |  | | Between 3rd and 4th terms |  | | Between 4th and 5th terms |  | | Between 5th and 6th terms |  | | | |
| 10. Would the data best be modeled by a linear function or an exponential function? How do you know? | | | | |
| 11. Write a recursive formula for the data: | | | 12. Write an explicit formula for the data: | |
| 13. Consider the following set of data:   |  |  | | --- | --- | | **x** | **y** | | 1 | 45.9 | | 2 | 42.2 | | 3 | 38.62 | | 4 | 35.19 | | 5 | 31.69 | | 6 | 28.08 | | Fill out the following table:   |  |  | | --- | --- | | **Differences** | | | Between 1st and 2nd terms |  | | Between 2nd and 3rd terms |  | | Between 3rd and 4th terms |  | | Between 4th and 5th terms |  | | Between 5th and 6th terms |  |  |  |  | | --- | --- | | **Ratios** | | | Of 1st and 2nd terms |  | | Of 2nd and 3rd terms |  | | Of 3rd and 4th terms |  | | Of 4th and 5th terms |  | | Of 5th and 6th terms |  | | | | |
| 14. Would the data best be modeled by a linear function or an exponential function? How do you know? | | | | |
| 15. Write a recursive formula for the data: | | | | 16. Write an explicit formula for the data: |