



Math worksheet on 'Patterning - Term Value for Increasing Arithmetic Pattern (Level 2)'. Part of a broader unit on 'Patterns and Sums - Advanced'

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|   |          |          |          |
|---|----------|----------|----------|
| <b>1</b> Find the term for $n=10$ in this increasing pattern (first term is $n=1$ )<br><br>1, 3, 5, 7 | <b>a</b> | <b>b</b> | <b>c</b> |
|   | -17      | 22       | 18       |
|   | <b>d</b> | <b>e</b> | <b>f</b> |
|   | 20       | 14       | 19       |

|   |          |          |          |
|---|----------|----------|----------|
| <b>2</b> Find the term for $n=10$ in this increasing pattern (first term is $n=1$ )<br><br>3, 5, 7, 9 | <b>a</b> | <b>b</b> | <b>c</b> |
|   | 22       | 24       | 21       |
|   | <b>d</b> | <b>e</b> | <b>f</b> |
|   | -15      | 19       | 1,536    |

|   |          |          |          |
|---|----------|----------|----------|
| <b>3</b> Find the term for $n=7$ in this increasing pattern (first term is $n=1$ )<br><br>2, 5, 8, 11 | <b>a</b> | <b>b</b> | <b>c</b> |
|   | 1,458    | 20       | 19       |
|   | <b>d</b> | <b>e</b> | <b>f</b> |
|   | 23       | 18       | 16       |

|  |          |          |          |
|--|----------|----------|----------|
| <b>4</b> Find the term for $n=8$ in this increasing pattern (first term is $n=1$ )<br><br>2, 4, 6, 8 | <b>a</b> | <b>b</b> | <b>c</b> |
|  | 14       | 44       | 16       |
|  | <b>d</b> | <b>e</b> | <b>f</b> |
|  | -5       | 11       | 256      |

|   |          |          |          |          |          |
|---|----------|----------|----------|----------|----------|
| <b>5</b> Find the term for $n=11$ in this increasing pattern (first term is $n=1$ )<br><br>3, 5, 7, 9, 11 |          |          |          |          |          |
| <b>a</b>  | <b>b</b> | <b>c</b> | <b>d</b> | <b>e</b> | <b>f</b> |
| 23  | -17      | 43       | 22       | 19       | 18       |

|  |          |          |          |          |          |
|--|----------|----------|----------|----------|----------|
| <b>6</b> Find the term for $n=12$ in this increasing pattern (first term is $n=1$ )<br><br>1, 5, 9, 13, 17 |          |          |          |          |          |
| <b>a</b>   | <b>b</b> | <b>c</b> | <b>d</b> | <b>e</b> | <b>f</b> |
| 42   | 45       | 49       | 67       | -43      | 41       |

|   |               |  |          |    |  |
|---|---------------|--|----------|----|--|
| <b>7</b> Find the term for $n=13$ in this increasing pattern (first term is $n=1$ )<br><br>1, 7, 13, 19 |               |  |          |    |  |
| <b>a</b>  | 85            |  | <b>b</b> | 61 |  |
| <b>c</b>  | 2,176,782,336 |  | <b>d</b> | 70 |  |
| <b>e</b>  | -71           |  | <b>f</b> | 73 |  |