SEQUENCES

A NUMERICAL SEQUENCE

A.1 FINDING NEXT TERM IN ARITHMETIC SEQUENCE

Ex 1: What is the 6^{th} term of this sequence?

| n | 1 | 2 | 3 | 4 | 5 | 6 |
|------------------------|---|---|---|---|----|---|
| $n^{\mathbf{th}}$ term | 3 | 5 | 7 | 9 | 11 | |

Ex 2: What is the 6^{th} term of this sequence?

| n | 1 | 2 | 3 | 4 | 5 | 6 |
|------------------------|---|---|----|----|----|---|
| $n^{\mathbf{th}}$ term | 3 | 8 | 13 | 18 | 23 | |

Ex 3: What is the 5^{th} term of this sequence?

| n | 1 | 2 | 3 | 4 | 5 |
|---------------------|----|----|----|----|---|
| $n^{	ext{th}}$ term | 20 | 18 | 16 | 14 | |

Ex 4: What is the 6^{th} term of this sequence?

| n | 1 | 2 | 3 | 4 | 5 | 6 |
|------------------------|----|----|----|-----------|----|---|
| $n^{\mathbf{th}}$ term | 80 | 70 | 60 | 50 | 40 | |

A.2 FINDING A TERM IN ARITHMETIC SEQUENCE

Ex 5: What is the 6^{th} term of this sequence?

| n | 1 | 2 | 3 | 4 | 6 |
|------------------------|---|---|---|---|-------|
| $n^{\mathbf{th}}$ term | 3 | 5 | 7 | 9 | |

Ex 6: What is the 5^{th} term of this sequence?

| n | 1 | 2 | 3 | 5 |
|---------------------|----|----|---|-------|
| $n^{	ext{th}}$ term | 15 | 12 | 9 | |

Ex 7: What is the 6^{th} term of this sequence?

| n | 1 | 2 | 3 | 4 | 6 |
|------------------------|---|----|----|----|-------|
| $n^{\mathbf{th}}$ term | 7 | 11 | 15 | 19 | |

Ex 8: What is the 5^{th} term of this sequence?

| n | 1 | 2 | 3 | 5 | |
|------------------------|-----------|----|----|-------|--|
| $n^{\mathbf{th}}$ term | 50 | 44 | 38 | | |

A.3 FINDING NEXT TERM IN GEOMETRIC SEQUENCE

Ex 9: What is the 6^{th} term of this sequence?

| n | 1 | 2 | 3 | 4 | 5 | 6 |
|---------------------|---|---|---|----|----|---|
| $n^{	ext{th}}$ term | 2 | 4 | 8 | 16 | 32 | |

Ex 10: What is the 5^{th} term of this sequence?

| n | 1 | 2 | 3 | 4 | 5 |
|------------------------|---|---|---|----|---|
| $n^{\mathbf{th}}$ term | 1 | 3 | 9 | 27 | |

Ex 11: What is the 6^{th} term of this sequence?

| n | 1 | 2 | 3 | 4 | 5 | 6 |
|---------------------|----|----|----|---|---|---|
| $n^{	ext{th}}$ term | 64 | 32 | 16 | 8 | 4 | |

Ex 12: What is the 5^{th} term of this sequence?

| n | 1 | 2 | 3 | 4 | 5 |
|------------------------|-----|----|----|---|---|
| $n^{\mathbf{th}}$ term | 243 | 81 | 27 | 9 | |

Ex 13: What is the 6^{th} term of this sequence?

| n | 1 | 2 | 3 | 4 | 5 | 6 |
|---------------------|---|---|----|----|----|---|
| $n^{	ext{th}}$ term | 3 | 6 | 12 | 24 | 48 | |