## Exponential Functions

|  | ${ }^{1} \mathrm{R}$ | E | C | U | R | S | I | V | E | P | A | T | T | E | R | N |  | G |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ${ }^{3} \mathrm{E}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | E |
| X |  |  |  |  |  |  | R |  | E |  |  |  |  |  |  |  |  | 0 |
| P |  |  |  | E |  |  | E |  | X |  |  | H |  |  |  |  |  | M |
| 0 |  | ${ }^{8} \mathrm{C}$ |  | X |  |  | C |  | P |  |  | A |  |  |  | C |  | E |
| N |  | 0 |  | P |  |  | U |  | 0 |  |  | L |  |  |  | 0 |  | T |
| E |  | M |  | L |  |  | R |  | N |  |  | F |  |  |  | M |  | R |
| N |  | M |  | 1 |  |  | S |  | E |  |  | L |  |  |  | P |  | 1 |
| T |  | 0 |  | C |  |  | 1 |  | N |  |  | I |  |  |  | 0 |  | C |
| 1 |  | N |  | 1 |  |  | V |  | T |  |  | F |  |  |  | U |  | S |
| A | ${ }^{10} \mathrm{~A}$ | R | 1 | T | H | M | E | T | 1 | C | S | E | Q | U | E | N | C | E |
| L |  | A |  | F |  |  | F |  | A |  |  |  |  |  |  | D |  | Q |
| F |  | T |  | 0 |  |  | 0 |  | L |  |  |  |  |  |  | 1 |  | U |
| U |  | 1 |  | R |  |  | R |  | D |  |  |  |  |  |  | N |  | E |
| N |  | 0 |  | M |  |  | M |  | E |  |  |  |  |  |  | T |  | N |
| C |  |  |  | U |  |  | U |  | C |  |  |  |  |  |  | E |  | C |
| T |  |  |  | L |  |  | L |  | A |  |  |  |  |  |  | R |  | E |
| 1 |  |  |  | A |  |  | A |  | Y |  |  |  |  |  |  | E |  |  |
| 0 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 5 |  |  |
| N | ${ }^{11} \mathrm{E}$ | X | P | 0 | N | E | N | T | 1 | A | L | G | R | 0 | W | T | H |  |

## Across

1. each term is defined using one or more previous terms
2. A sequence whose successive terms differ. by the same nonzero number
3. an exponential function of the form $f(x)=a b$ in which $b>1$

## Down

2. a sequence in which each term after the first term a is obtained by multiplying the previous term by a constant $r$, called the common ratio. 3. function whose value is a constant raised to the poer of the arument
3. A formula for a sequence in which one or more previous terms are used to generate the next term
4. an exponential function of the form $f(x)=a b$ in which $0<b<1$
5. If you can find an explicit formula for a sequence, you will be able to quickly and easily find any term in the sequence simply by replacing n with the number of the term you seek.
6. he half-life of a substance is the time it takes for one-half of the substance to decay into another substance
7. the ratio of a term to the previous term. This ratio is usually indicated by the variable r .
8. Interest earned or paid on both the principal and previously earned interest
