

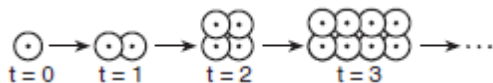
EXPRESSIONS AND EQUATIONS: Modeling Equations from a Table

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NAME: _____

1. 060909b

The accompanying diagram represents the biological process of cell division.



If this process continues, which expression best represents the number of cells at any time, t ?

- [A] 2^t [B] $2t$ [C] $t+2$ [D] t^2

2. 010813a

Which equation expresses the relationship between x and y , as shown in the accompanying table?

x	0	1	2	3	4
y	2	5	8	11	14

- [A] $y = x + 3$ [B] $y = x + 2$
 [C] $y = 3x + 2$ [D] $y = 2x + 3$

3. 080420a

Which linear equation represents the data in the accompanying table?

c	d
0	20.00
1	21.50
2	23.00
3	24.50

- [A] $d = 21.50c$ [B] $d = 1.50c$
 [C] $d = 20.00c + 1.50$
 [D] $d = 1.50c + 20.00$

4. 060411b

Which equation models the data in the accompanying table?

Time in hours, x	0	1	2	3	4	5	6
Population, y	5	10	20	40	80	160	320

- [A] $y = 2x$ [B] $y = 2^x$
 [C] $y = 2x + 5$ [D] $y = 5(2^x)$

5. 010211a

If x and y are defined as indicated by the accompanying table, which equation correctly represents the relationship between x and y ?

x	y
2	1
3	3
5	7
7	11

- [A] $y = 2x - 3$ [B] $y = x + 2$
 [C] $y = 2x + 3$ [D] $y = 2x + 2$

6. 010113a

Which equation could represent the relationship between the x and y values shown in the accompanying table?

x	y
0	2
1	3
2	6
3	11
4	18

- [A] $y = 2^x$ [B] $y = x^2 + 2$
 [C] $y = x + 2$ [D] $y = x^2$

[1] A

[2] C

[3] D

[4] D

[5] A

[6] B