



# Exponential Functions SOLUTIONS



1. (a) 2.303  
(b) 3.219  
(c) 1.67  
(d) 0.931  
(e) 1.792  
(f) 1.04  
(g) 2.484  
(h) 0.427  
(i) 4.657  
(j) 2.944  
(k) -0.094  
(l) 11.829  
(m) -0.307
2.  $V = 100e^{0.04t}$   
(a) €122.14  
(b) 17.33 years
3.  $V = 1100e^{-0.25t}$   
(a) €667.18  
(b) During 2019
4.  $V = 505e^{0.035t}$   
(a) €601.58  
(b) 19.52 years
5.  $Y = 6.070e^{0.0123t}$   
(a) 7.76 Billion  
(b) 11.23 Billion  
(c) 2040





6.  $V = 25000e^{-0.1703t}$   
€12,650.24
7.  $Y = 3.6e^{0.03279t}$   
(a) 3.97 kg  
(b) 10 weeks
8.  $V = 520000e^{-0.34657t}$   
€45,961.94
9. (a)  $Y = 2.5e^{0.3185t}$   
(b) 8.94 million  
(c) 2019
10. (a)  $N = 500e^{0.231049t}$   
(b) 1587  
(c) 13 hours

Leamy Maths Community

