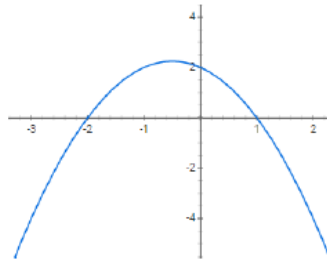


7. If $f(x)$ is a function whose graph is shown below, then $f(x) > 0$ whenever

- (A) $x > 2$
- (B) $x > 0$
- (C) $-2 < x < 1$
- (D) $x < -2$ or $x > 1$

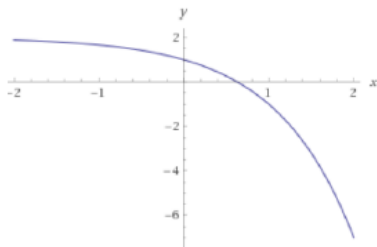


9. If $f(x) = \frac{x^2-5}{x+5}$, then $f(a+2) =$

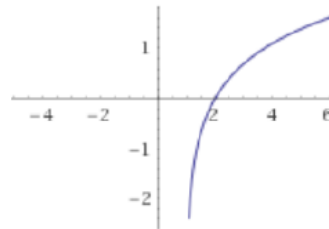
- (A) $a - 3$
- (B) $\frac{a^2+4a-1}{a+7}$
- (C) $\frac{a^2-1}{a+7}$
- (D) $-\frac{1}{7}$

10. Which of the graphs below could be a sketch of $f(x) = -3^x + 2$?

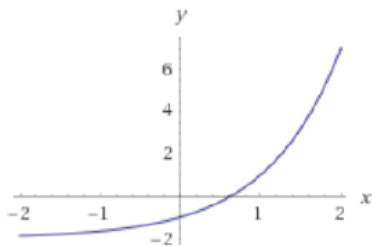
(A)



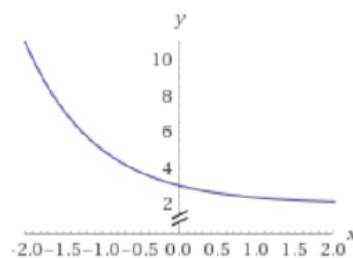
(C)



(B)

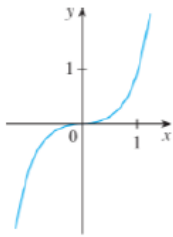


(D)

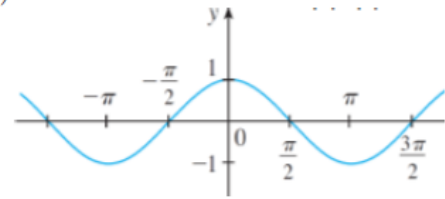


11. A function f is called even if $f(-x) = f(x)$. Which of the functions shown below is even?

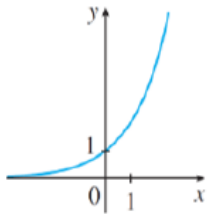
(A)



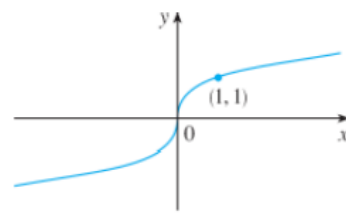
(C)



(B)



(D)

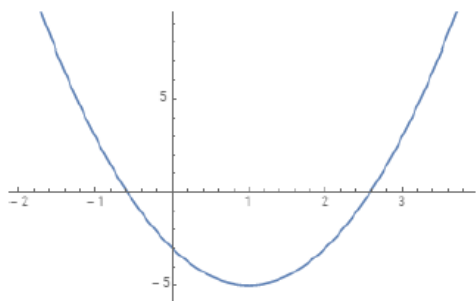


15. A population starts with 100 individuals and doubles in size every 5 years. How many individuals will there be in 25 years?

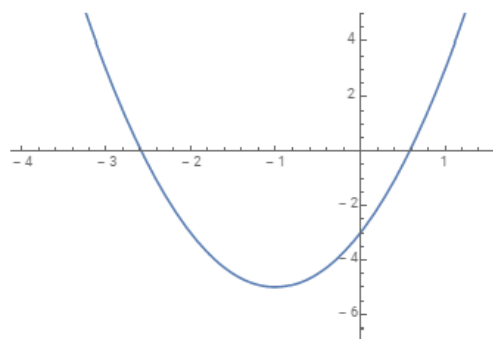
- (A) 3200
- (B) 500
- (C) 2500
- (D) 100^5

16. Which of the following graphs represents the graph of $y = 2x^2 - 4x - 3$?

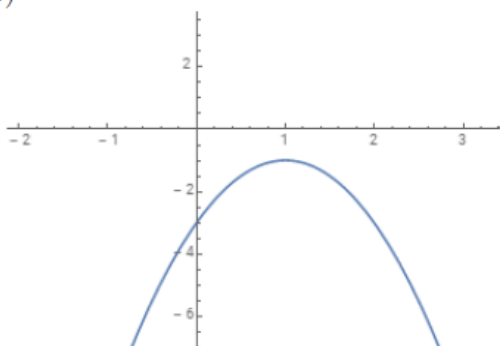
(A)



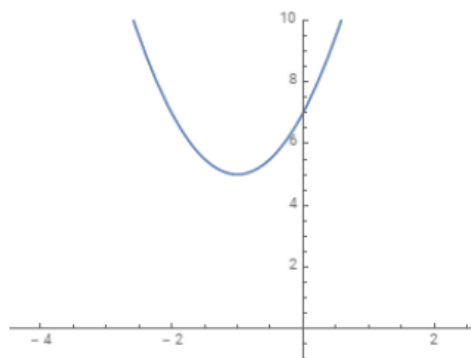
(C)



(B)



(D)



24. If the sides of a cube increase by a factor of 2, then the volume of the cube increases by a factor of

(A) 2

(B) 6

(C) 8

(D) Not enough information to tell.