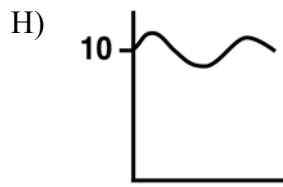
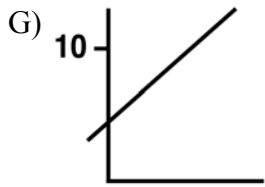
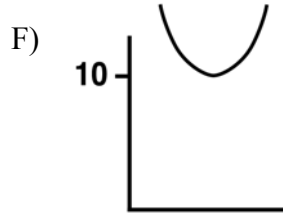
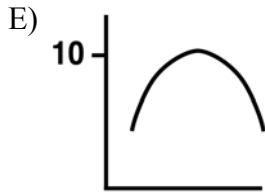


**Grade 11 – Standard 11**

6. Which of the following functions has a **maximum** value of 10?

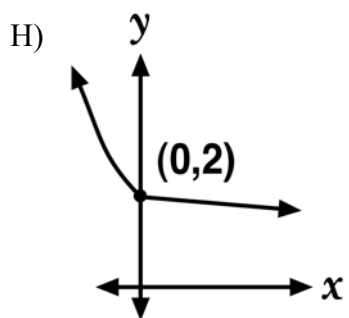
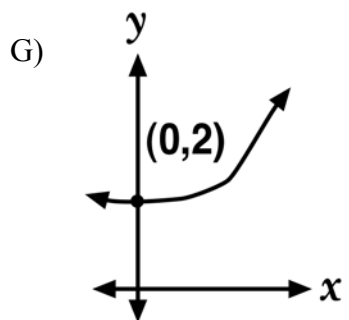
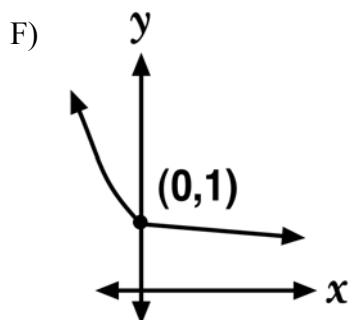
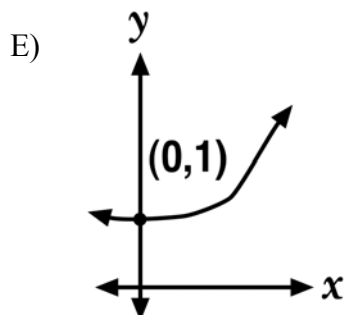


47. When a cannonball is shot into the air, its height, in feet, during the flight is given by the function  $h(t) = 160 + 480t - 16t^2$  where  $h(t)$  is the height in seconds. What is the **maximum height** of the cannonball?

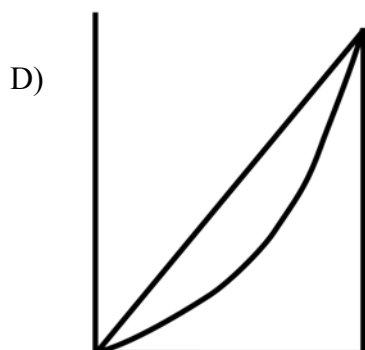
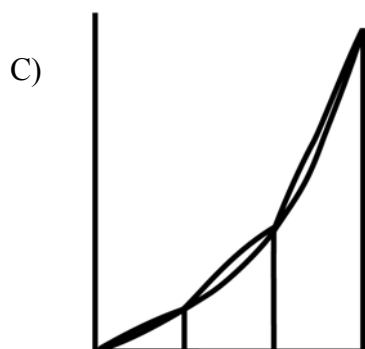
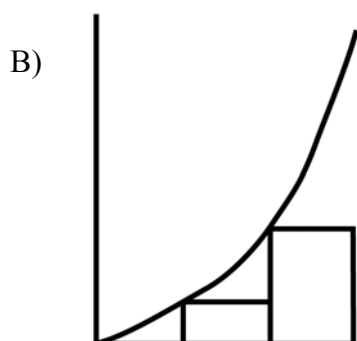
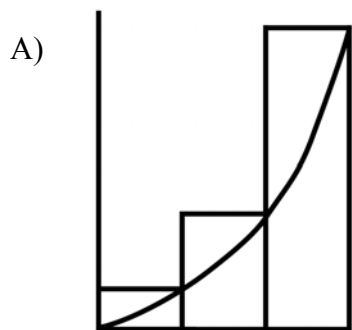
- E) 15 feet
- F) 160 feet
- G) 3,744 feet
- H) 3,760 feet

49. Which of the following is the graph of

$$y = 2^{-25x}$$



55. Which of the following methods **most accurately estimates** the area under the curve of  $y = x^2$  ?



61. What is the sum of the following infinite series?

$$\frac{2}{3} + \frac{1}{3} + \frac{1}{6} + \frac{1}{12} + \dots$$

A)  $1\frac{1}{4}$

B)  $1\frac{7}{24}$

C)  $1\frac{1}{3}$

D) 2