**STUDY GUIDE**

**8.F.B.4 A hot air balloon was flying at an altitude of 300 meters when the pilot decided to land by descending at a rate of 2 meters per second. For which of these functions does y represent the altitude of the hot air balloon if x represents the number of seconds since the pilot started her landing?**

**A. y = -2x - 300**

**B. y = -2x + 300**

**C. y = 2x - 300**

**D. y = 2x + 300**

**8.F.B.4 Rick will participate in a walk–a–thon to raise money for charity. The amount he will raise based on the number of miles he walks is shown in the table, which represents a linear function. Choose all correct statements about Rick's walk.**

**A. If Rick walks 0 miles, he will raise $0.**

**B. If Rick walks 0 miles, he will raise $60.**

**C. If Rick walks 0 miles, he will raise $80.**

**D. For each mile that Rick walks, he will raise an additional $60.**

**E. For each mile that Rick walks, he will raise an additional $80.**

**F. For each mile that Rick walks, he will raise an additional $240.**

**8.EE.B.5 For her science project, Mariam is exploring different temperature scales. She has found that degrees Celsius can be converted to degrees Newton by multiplying the number of degrees Celsius by 33/100.**

**Suppose she constructed a graph, degrees Celsius on the horizontal axis and degrees Newton on the vertical axis. If she plotted some points and drew a line through them, which of these statements would be true? Choose all that apply.**

**A. The slope of the line would be 0.**

**B.The slope of the line would be 33/100.**

**C. The y-intercept would be 0.**

**D. The y-intercept would be 33/100.**



