

Linear Story Problems

1. Mr. Lischwe and Mr. Allen both had low batteries on their smartphones, and started charging them at 2:00. Even though Mr. Lischwe's phone started with less charge, he bet Mr. Allen that his phone would finish charging faster. At 2:06, Mr. Lischwe's iPhone was at 17%. At 2:14, his iPhone was at 33%. Meanwhile, Mr. Allen's phone charged 1.5% every minute, and at 2:10, his phone was at 34%.

a. How much charge did each of their phones have at 2:00 when they plugged them in?

b. When will each of their phones finish charging? Will Mr. Lischwe win his bet?

2. Which points are on the same line that passes through $(-4, -3)$, $(20, 15)$, and $(48, 36)$?
Select all that apply.

A. $(-8, -6)$

B. $(-2, -1)$

C. $(0, 0)$

D. $(4, 3)$

E. $(6, 8)$

3. Three friends were able to fill six bags of candy while trick or treating for three hours. How many bags of candy could one of the friends fill trick-or-treating for one hour at the same average pace?