

Fill in the missing information for the chart.

$$\frac{30-0}{45-50} = \frac{30}{-5} = -6 \quad m = -6 \quad y = mx + b \quad (10, 0)$$

$$0 = 50(-6) + b \quad b = 300$$

Part of Graph	Equation	Domain
From A to B	$y = 5x$	$[0, 10]$
From B to C	$y = 0x + 50$	$[10, 25]$
From C to D	$y = -6x + 200$	$[25, 30]$
From D to E	$y = \frac{2}{3}x$	$[30, 45]$
From E to F	$y = -10x + 800$	$[45, 50]$

$$\frac{50}{10} = 5 = m$$

$$\frac{0}{15} = 0 = m$$

$$m = \frac{50-20}{25-30} = \frac{+30}{-5} = -6$$

$$y = mx + b \quad (25, 50)$$

$$50 = -6(25) + b$$

$$50 = -150 + b$$

$$\frac{+150 \quad +150}{200 = b}$$

$$m = \frac{30-20}{45-30} = \frac{10}{15} = \frac{2}{3}$$

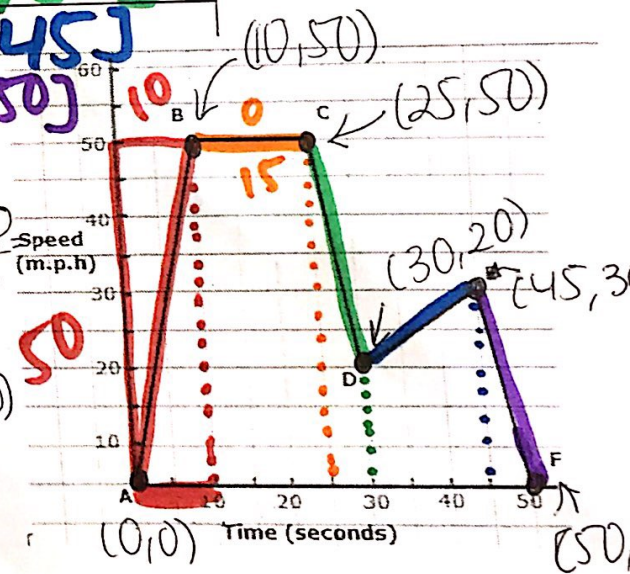
$$m = \frac{2}{3}$$

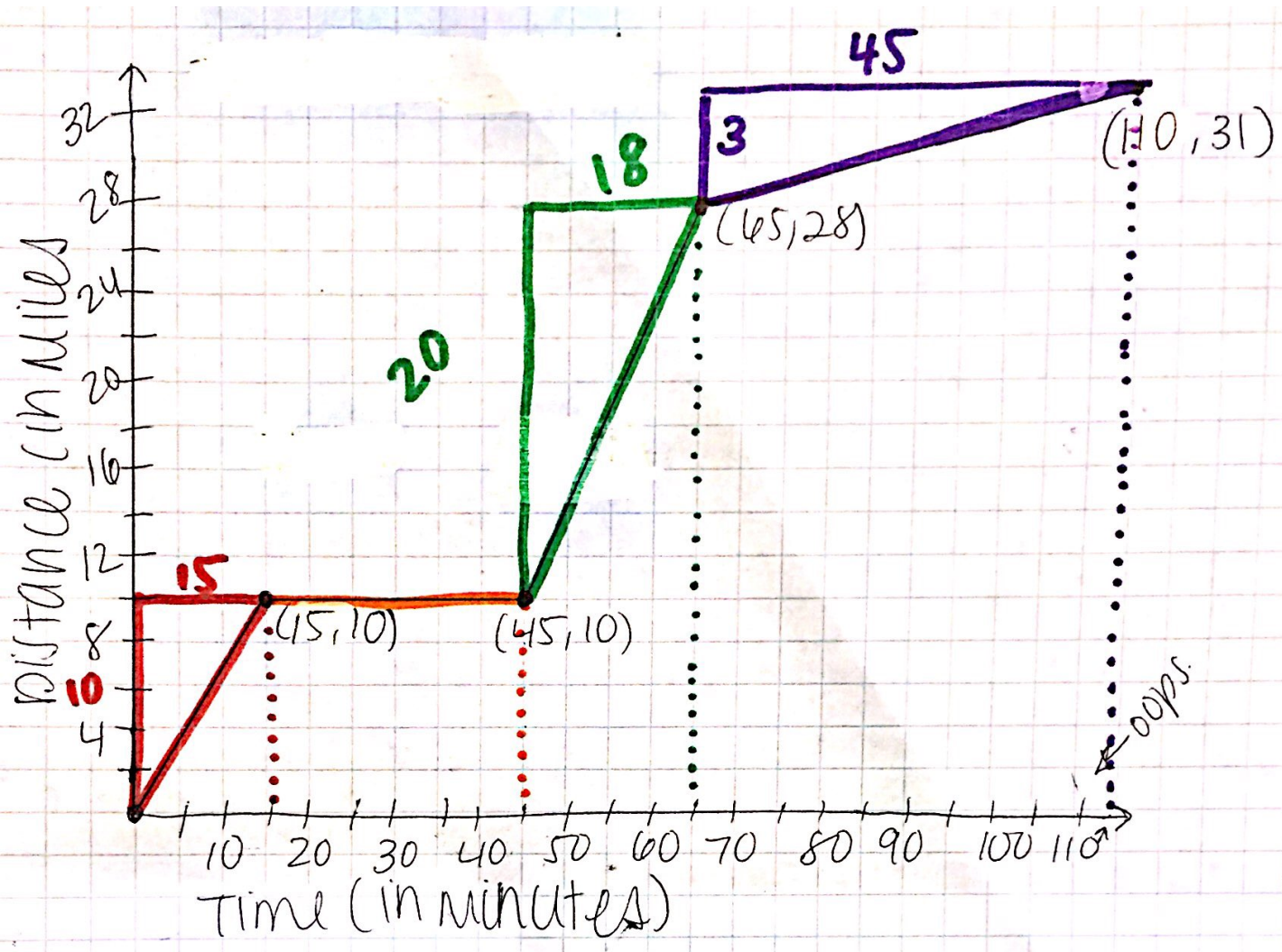
$$y = mx + b \quad (30, 20)$$

$$20 = 30\left(\frac{2}{3}\right) + b$$

$$20 = 20 + b$$

$$\frac{-20 \quad -20}{b = 0}$$





2. Ms. Brauer starts out for school at 5:30 AM and drives 10 miles in 15 min. She then stops for 30 minutes at Dunkin Donuts for a coffee. Afraid that she might be late for school, she continues driving a little faster for another 20 minutes and covers 18 miles at which point her car breaks down. From that point, she jugged the remaining 3 miles to school in 45 minutes.

Draw a graph with the distance on the vertical axis and time on the horizontal axis. (On a separate sheet of paper)

Then fill out the table below: