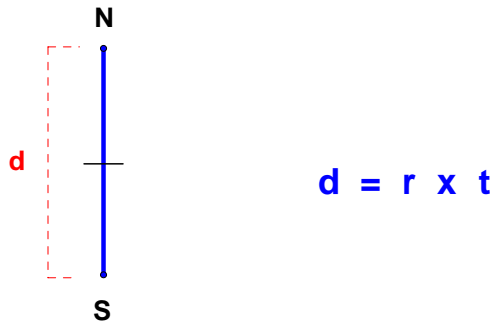


Two trucks leave a warehouse at the same time. One travels due north at an average speed of 60 mph, and the other travels due south at an average speed of 55 mph. When will the trucks be 500 miles apart?



$$\text{rate} = (60 + 55) \text{ mph} = 115 \text{ mph}$$

$$d = 500 = 115t$$

$$t = \frac{500}{115} \approx 4.348 \text{ hours} \approx 4 \text{ hours, } 21 \text{ minutes}$$