

Bad Day Boris

$speed = distance / time$

Name _____
1 2 3 4 5 6 7 8

1. Boris the bear is lumbering along at a constant rate of 4 m/s. If he walks for 600 seconds, how far will he travel?

d = _____ m

2. Because of his slow walk, Boris missed the bus. Lucky for Boris however, there is another bus stop 1000 meters away. If the bus is arriving in 120 seconds, how fast must he run?

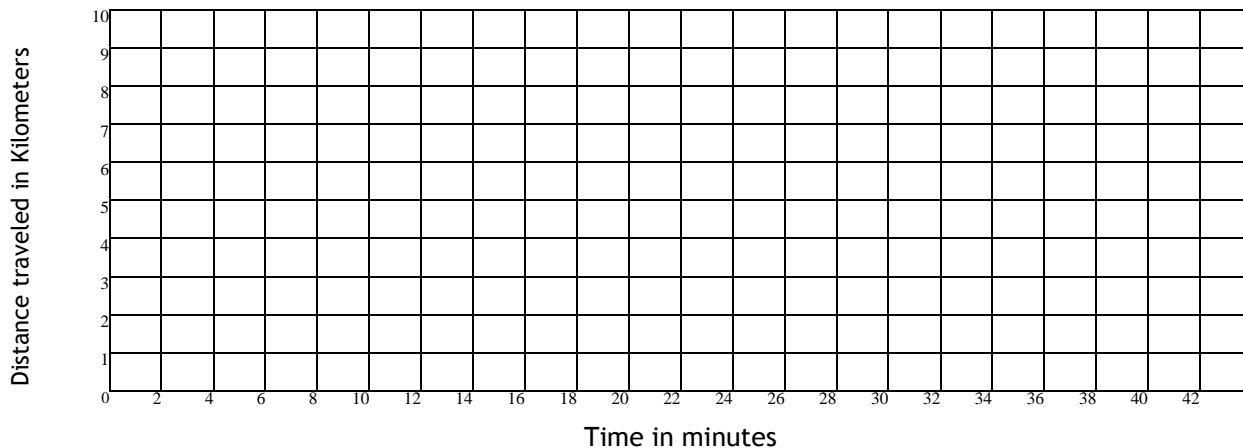
S = _____ m/s



3. Despite arriving on time, Boris was not allowed to ride on the bus because of his bear like appearance. Sadly, Boris walked the long, 8,000 m remaining distance to work at a rate of 3.6 m/s. How long did it take him to complete this walk?

t = _____ s

4. Using the information from questions 1, 2 and 3, make a graph of the bear walking to work below.



5. Boris was moving the fastest when he was running for the bus. When graphed, how did this section appear different from the other sections?

6. At the coal mines where Boris works, He is docked 5 dollars of pay for every minute he is late. Boris expected his trip to take 15 minutes, arriving perfectly on time. How much money will Boris owe for being late?

Owed = \$ _____

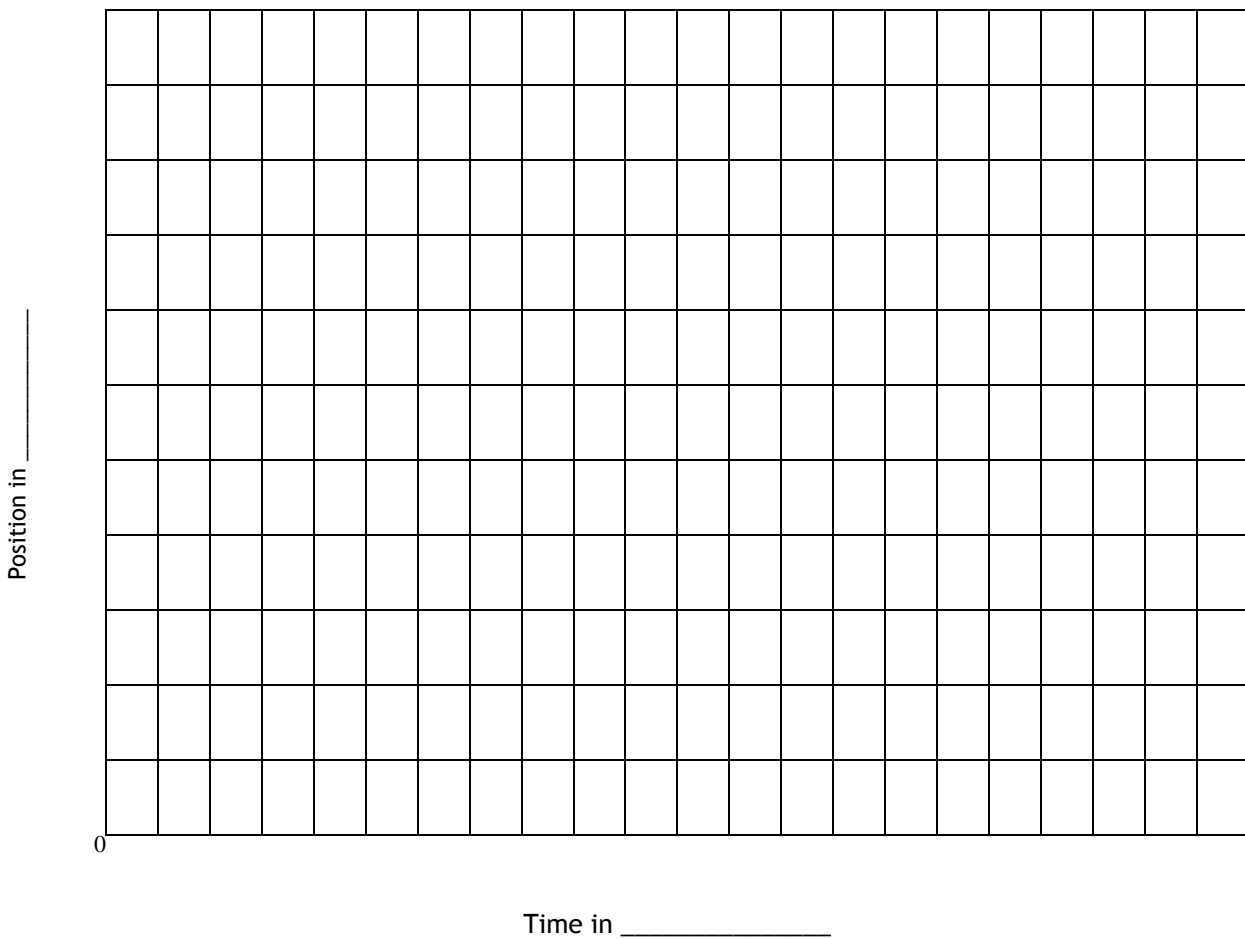
7. After a long day at work in the coal mines, Boris began his trek home. Using his stopwatch, Boris measures that he can walk 300 m in 110 seconds. At this pace, how long will it take him to make the trip home? (use total distance from the graph above).

t = _____ s

5. Finally making it home, Boris realizes that he forgot his keys at work. In a fit of sheer frustration, he yells at the top of his lungs (sound travels at 340 m/s). If his uncle Demetri heard the roar 3.4 seconds later, how far does Boris live from Demetri's house?

$d =$ _____ m

6. Jumping onto his skateboard, Boris starts heading towards Demetri's house at a constant 7 m/s. At the same time, Demetri jumps into his car and drives towards Boris's house at 20 m/s. Graph the motion of both bears (Given that they start at the same time), and indicate on your graph where the two will meet. Use the distance from question 5 as Demetri's starting position, and Zero as Boris's starting position.



For Fun: When they meet, what does Demetri say to Boris?