

2.1 Quizlette – Speed and DA

Name _____

Speed (Use your formula packet)

1. A Cross Country runner runs 5000 m in 1292 s (21:32). What is their velocity in m/s?
2. A car going 60 mph is traveling at 88 f/s. How many feet will it travel in the 1.7 s it takes you to pick a song on your iPhone?
3. What time does it take a baseball going 132 f/s (90 mph) to go the 60.5 feet to home plate?
4. A car going 95 f/s can see 160 feet with its low beams at night. What time does it take to go this distance?
5. A car going 95 f/s goes how far in the 1.5 seconds it takes most drivers to react?
6. A runner goes 100 m in 12.0 s. What is their velocity?
7. A train going 18 m/s goes how far in 52 s?
8. A truck that goes 62 m in 2.1 s is going what speed?
9. Sound travels at 343 m/s. What time does it take to go the 1609 m that are in a mile?

1) 3.87 m/s, 2) 149.6 f, 3) 0.458 s, 4) 1.68 s, 5) 142.5 f, 6) 8.3 m/s, 7) 936 m, 8) 29.5 m/s, 9) 4.69 s

Unit Conversions (use your shortcuts from your formula packet)

10. Convert 26.82 m/s to km/hr.

11. Convert 26.82 m/s to mph.

12. Convert 26.82 m/s to f/s.

13. A Winchester .22 rim fire has a muzzle velocity of 1950 f/s. Convert that to m/s

14. A .30-30 center fire has a muzzle velocity of 2467 f/s. What is that in mph?

15. The speed limit in Montana is 80 mph. What is that in m/s?

16. The recommended maximum speed on the Autobahn is 130 km/hr. What is that in mph?

17. Rural roads in the EU often have a speed limit of 50 km/hr. What is that in f/s?

18. Convert 30 mph to f/s.

10) 96.6 km/hr, 11) 60 mph, 12) 88 f/s, 13) 594 m/s, 14) 1682 mph, 15) 35.8 m/s, 16) 80.8 mph, 17) 45.6 f/s, 18) 44 f/s