Distance, Rate, and "Per" Time Worksheet

Name: _____

1.) You buy a new car with a fuel efficiency of 20 miles "per" gallon on the freeway, and 14 miles per gallon in the city. The gas tank holds 10 gallons. How far can you travel on the highway in your new car with a full tank of gas?

Answer: _____

2.) If a speedboat has gone an average speed of 25 miles per hour, and has traveled 65 miles, how many minutes has the boat been traveling?

Answer: _____

3.) A jet fighter is speeding across the sky at an average of 150 miles per hour from its take off to its target. It reaches a maximum height of 15,000 feet. If its target is 200 miles from the place where it took off, and if it left at 10:30 AM in the morning, when will it reach its target?

Answer: _____

4.) Two trains are travelling toward each other. The first train is going an average speed of 40 miles per hour. The second train is going an average speed of 60 miles per hour. If the trains have 380 miles of track between them, and they stay on a collision course toward each other, in how many hours will they crash (give the answer in hours and minutes)?

Answer: _____

5.) Two trains are traveling on the same track, and in the same direction, but at different speeds. The slower train is ahead of the faster train. The slower train is traveling at an average speed of 35 miles per hour. The faster train is traveling at an average speed of 55 miles per hour. If the trains initially have 400 miles of track between them, how many hours will it take for the fast train to be 60 miles away from the slow train?

Answer: _____

6.) You enter into the Gumball 3000, and you have continually gone an average speed of 110 miles per hour in your souped up Viper. On the 5^{th} day of the Gumball 3000, your car breaks down, and you have to fix it. On that day the slowest car, a tricked out Pinto, has been crawling at an average of 60 miles per hour, and it left on time at 6:30 AM. You leave at 9:30 AM. At what time will you catch up to the slowest car on the 5^{th} day of racing if you assume the average speeds listed above?

Answer: _____

7.) A radioactively charged, suicidal fly is traveling on the front of one of two trains which are set to collide with each other. One train is going 40 mph, the other is going 30 mph, and the amount of track between them spans for 350 miles when the fly decides to bound back and forth between the trains at an average speed of 100 mph. How much total distance will the fly have traveled by the time the trains collide?

Answer: _____