

1. Suppose a coffee shop sells a cup of espresso for \$4.00, and a cup of cappuccino for \$5. On Monday, Jack BeNimble sold 45 more cups of cappuccino than espresso. He sold a total of \$441. How many cups of each were sold?

2. Jack BeQuick's bookstore sells pencils for \$0.25 each and erasers for \$0.45 each. Last Tuesday the store sold 23 more pencils than erasers for a total of \$34.45. How many of each item was sold?

3. Jack JumpOverCandleSticks sells hamburgers for \$1.99 each and double cheeseburgers for \$2.75 each. Last Sunday he sold 12 more double cheeseburgers than hamburgers for a total of \$189.42. How many of each item was sold?

4. An advertisement for a propel drink claims that the drink contains 15% blueberry juice. Snoopy needs 5 quarts of the drink to serve at a party and he wants the drink to contain 35% blueberry juice. How much of the 15% drink and pure blueberry juice should Snoopy mix to obtain 5 quarts of a mixture that contains 35% blueberry juice?

5. The Bat-mobile contains a radiator that has a capacity of 12 quarts and is filled with a 40% antifreeze solution. How much must be drained off and replaced with pure antifreeze to obtain a 60% antifreeze solution?

6. Elmo was reading a label for a fruit drink that is claiming that it contains 25% orange juice. How much pure orange juice would he have to add to 10 quarts of the drink to obtain a mixture containing 50% orange juice?

7. On Friday, Kermit and Ms. Piggy went to go visit Big Bird for the weekend. Luckily, traffic was light and they were able to make the 125-mile trip in exactly two hour. On Monday, they weren't so lucky. The trip home took exactly three hours. What was their average speed for the round trip?

8. Bugs and Daffy traveled 56 miles in 3 hours. What was

their average speed?

9. Superman flies 2500 miles due east in 2 hours and 1800 miles due south in 3 hours. What is his average speed?

10. Both Tom and Jerry leave their house at the same time, one heading east and the other heading west. Tom travels at 55 mph, and Jerry travels at 75 mph. In how many hours will they be 45 miles apart?

11. Suppose Garfield and Odie leave at the same time traveling in the same direction. Garfield drives at a rate of 40 km/h and Odie at 55 km/h. When will they be 25 km apart?

12. Sponge Bob and Elvis leave Memphis at the same time, one heading north and the other heading south. Sponge Bob travels at 45 mph, and Elvis travels at 80 mph. In how many hours will they be 290 miles apart?