

Name _____

Score _____

Solve.

1. One integer is three more than another integer. The sum of the two integers is forty-seven. Find the integers. _____
2. One integer is eleven less than another integer. The sum of the two integers is 57. Find the integers. _____
3. Tickets for a "little theater" production sold for \$4.00 for each adult and \$1.50 for each child. The total receipts for 400 tickets sold were \$1400. Find the number of adult tickets sold. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. Four times the smallest of three consecutive even integers is ten more than three times the largest integer. Find the integers. _____

Name _____

Score 2.4.2

$$D = R \cdot T$$

Solve.

1. Two buses start from the same station and drive in opposite directions. The express bus is traveling 15 mph faster than the local bus. In 3 h the buses are 345 mi apart. Find the rate of each bus.

2. Two planes start from the same point and fly in opposite directions. The first plane is flying 30 mph slower than the second plane. In 2 h the planes are 1100 mi apart. Find the rate of each plane.

1. _____

2. _____

3. A speeding car going 70 mph has a 1-hour head start on a helicopter trying to overtake the car. The helicopter is traveling at 140 mph. How far from the starting point does the helicopter overtake the car?

4. An investment of \$7500 is made at 10.4%. How much additional money must be invested at an annual simple interest rate of 14% so that the total interest earned is 12% of the total investment?

3. _____

4. _____

5. An investment of \$12,000 is deposited into two simple interest accounts. On one account the annual simple interest rate is 11%. On the other, the annual simple interest rate is 13%. How much should be invested in each account so that each account earns the same interest?

5. _____

6. _____

7. Two cars are 318 mi apart and traveling toward each other. One car travels 6 mph faster than the other car. The cars meet in 3 h. Find the speed of each car.

7. _____

5. A butcher has some hamburger that is 24% fat and some hamburger that is 16% fat. How many pounds of each should be mixed to make 80 lb of hamburger that is 18% fat?

6. A hospital staff mixed a 70% disinfectant solution with a 30% disinfectant solution. How many liters of each were used to make 30L of a 45% disinfectant solution?

5. _____

6. _____