$\qquad$

## Please do all your work on a separate piece of paper. Please show all setup and work!

1. Marty inherited a sum of money from a relative. He deposits some of the money at $16 \%$, and $\$ 4000$ more than this at $12 \%$. He earns $\$ 3840$ in interest per year. How much is invested at each rate?
2. Evelyn invested some money at $10 \%$, and $\$ 5000$ more than this at $14 \%$. Her total annual interest was $\$ 3100$. How much was invested at each rate?
3. Joe invested some money at $8 \%$, and $\$ 3000$ more than twice as much at $10 \%$. The total annual interest was $\$ 2540$. How much was invested at each rate?
4. Larry has $\$ 20,000$ to invest, some at $5 \%$ and some at $7 \%$. If the annual interest is $\$ 1240$, how much is invested at each rate?
5. Mary has $\$ 35,000$ to invest, some at $6 \%$ and some at $9 \%$. If the annual interest is $\$ 2760$, how much is invested at each rate?
6. Ink worth $\$ 100$ per barrel will be mixed with ink worth $\$ 60$ per barrel to get 48 barrels of ink worth $\$ 75$ per barrel. How many barrels of each type of ink should be used?
7. Helen has 2 more dimes than nickels. Altogether she has $\$ 1.70$. How many coins of each type does she have?
8. A bank teller has some five-dollar bills and some twenty-dollar bills. The teller has 5 more twenties than fives. The total value of the money is $\$ 725$. How many of each type of bill does she have?
9. A merchant wishes to mix candy worth $\$ 5$ per pound with candy worth $\$ 2$ per pound to get 60 pounds of a mixture that can be sold for $\$ 3$ per pound. How many pounds of each type of candy should be used?
10. A merchant wishes to mix some candy worth $\$ 1.50$ a pound with some candy worth $\$ 5.50$ a pound to get 240 pounds of candy worth $\$ 3.50$ per pound. How many pounds of the $\$ 5.50$ candy should she use?
