

Applications

He that goes a borrowing goes a sorrowing.

Benjamin Franklin, American Statesman

1. Interpret the quote in the context of what you learned.

Solve each problem. Round monetary amounts to the nearest cent.

2. Monique buys a \$4,700 air conditioning system using an installment plan that requires 15% down. How much is the down payment?
3. Craig wants to purchase a boat that costs \$1,420. He signs an installment agreement requiring a 20% down payment. He currently has \$250 saved. Does he have enough for the down payment?
4. Jean bought a \$1,980 snow thrower on the installment plan. The installment agreement included a 10% down payment and 18 monthly payments of \$116 each.
 - a. How much is the down payment?
 - b. What is the total amount of the monthly payments?
 - c. How much did Jean pay for the snow thrower on the installment plan?
 - d. What is the finance charge?
5. Linda bought a washer and dryer from Millpage Laundry Supplies for y dollars. She signed an installment agreement requiring a 15% down payment and monthly payments of x dollars for one year.
 - a. Express her down payment algebraically.
 - b. How many monthly payments must Linda make?
 - c. Express the total amount of the monthly payments algebraically.
 - d. Express the total amount Linda pays for the washer and dryer on the installment plan algebraically.
 - e. Express the finance charge algebraically.
6. Zeke bought a \$2,300 bobsled on the installment plan. He made a \$450 down payment, and he has to make monthly payments of \$93.50 for the next two years. How much interest will he pay?
7. Gary is buying a \$1,250 computer on the installment plan. He makes a down payment of \$150. He has to make monthly payments of \$48.25 for $2\frac{1}{2}$ years. What is the finance charge?
8. Mazzeo's Appliance Store requires a down payment of $\frac{1}{3}$ on all installment purchases. Norton's Depot requires a 30% down payment on installment purchases. Which store's down payment rate is lower?
9. Ari purchased a microwave oven on the installment plan for m dollars. He made a 20% down payment and agreed to pay x dollars per month for the two years. Express the finance charge algebraically.