

Choosing and Using a Credit Card Responsibly

1. Clare wants to buy a used wide-screen TV that sells for \$2,000 cash. She will make a down payment of \$1,000 and then six monthly payments of \$200. What is the full installment price and the annual interest rate?
2. Lauren has his heart set on a new GPS that will cost him \$325 if he pays cash and \$400 if he pays by installments. If the down payment is \$50, how much will he pay in each of 12 monthly payments? What is the annual interest rate on this purchase?
3. Jake is looking to buy a used car that will cost him \$10,000. He will make a down payment of \$5,000 and then twenty-four payments of \$225. What is the full installment price and the annual interest rate?
4. Vanessa wants to buy a new sewing machine that sells for \$2,000 cash. She plans to make a down payment of \$1000 and then twelve monthly payments of \$95. What is the full installment price and the annual interest rate?
5. Armando's motorcycle needs a new motor. It will cost him \$700 if he pays cash and \$825 if he pays by installments. If the down payment is \$275 on the motor, how much will he pay in each of 12 monthly payments? What is the annual interest rate on this purchase?
6. The Sharps want to finance a cruise to Alaska for \$2,800. The offer is for no money down with twenty-four payments of \$150. What is the full installment price and the annual interest rate?
7. Ana is moving into her own apartment and wants to purchasing a Home Entertainment Center. The cost of the HEC is \$1,350 if paid in cash and \$1,495 if she pays in installments. If the down payment is \$450, how many months will it take her to pay off the installment loan if she pays \$44 per month?



Answers:

1) Total=2200

Interest= 10%

$1000+(200 \times 6) = 2200$

$2200-2000=200$ in interest

$(200/2000) \times 100 = 10\%$ interest rate

2) $400-50=350$

$350/12=29.167$ a month

$(75/325) \times 100 = 23.077\%$ interest rate

3) $10000-5000=5000$

$225 \times 24 = 5400$ full installment price

$5000-5400=400$

$(400/5000) \times 100 = 8\%$ interest rate

4) $2000-1000=1000$

$95 \times 12 = 1140$

$1140-1000=140$

$(140/1000) \times 100 = 14\%$ interest rate

5) $825-275=650$

$650/12=54.167$ a month

$(125/650) = 19\%$ interest rate

6) $24 \times 150 = 3600$ full installment

$3600-2800=800$

$(800/2800) \times 100 = 28.57\%$

7) $1495-450=1045$

$1045/44=23.75$ aka 24 months

