

Worksheet 11.5

Billy Bob Tumbleweed found a trailer home selling for \$39,000. The taxes on the trailer are \$350 per year and insurance is \$156 per year. The bank is requiring a 12% down payment and 2 points to be paid and the interest rate is 6%. Billy Bob's gross monthly income is \$1950. He has 15 monthly payments left on his dog, cat, tractor and horse. The total monthly payments for these items are \$375. The bank will approve a loan that has a total monthly mortgage payment of principal, interest, property taxes, and insurance that is less than or equal to 28% of his adjusted monthly income.

1. Determine the required down payment.

$$\cdot 12(39000) = 4680$$

2. Determine the cost of the points.

$$39000 - 4680 = 34320(.02) = 686.40$$

3. Determine the 28% of his adjusted monthly income.

$$1950 - 375 = 1575(.28) = 441$$

4. Determine the monthly payment of principal and interest for a 25 year loan.

$$\frac{34320}{1000} \times 6.44 = 221.02$$

5. Determine their total monthly payment, including insurance and taxes.

$$\frac{350}{12} + \frac{156}{12} + 221.02 = 263.19$$

6. Determine whether Billy Bob will qualify for the loan.

yes

7. Determine how much of the first payment on the loan is applied to the principal.

$$I = 34320(.06)\left(\frac{1}{12}\right) = \frac{221.02}{-171.60} \\ 49.42$$