Area - Consumer and Family Resources
Problem - Financing a New Home

## Standards

SD FACS Standard
FCS 7.1.1
Examine how individuals and families make choices to satisfy needs and wants.
FCS 7.1.6
Implement decisions related to housing and furnishings based on the needs of individuals and family members
FCS 7.2.1
Examine how individuals and societies make choices to satisfy needs and wants with limited resources.

SD Mathematics Standards
Math 9-12.N.2.1
Add, subtract, multiply, and divide real numbers including integral exponents.
Math 9-12 N.3.1
(Analysis) Use estimation strategies in problem situations to predict results and to check the reasonableness of results.
Math 9-12 S.1.1
Draw conclusions from a set of data.

## Problem

Tim and Sandy Wright have decided to purchase a new home. The one they have chosen sells for $\$ 125,000$. They have saved enough money for the $10 \%$ down payment and have budgeted $\$ 1200$ a month for mortgage payments. They need to finance the rest of the cost of the house with a lending agency. Help the Wright family find out just what their new home will cost.

Find the total amount to be financed. Multiply the price of the house ( $\$ 125,000$ ) by the down payment (.10). Subtract your answer from the price of the home.

Suggested web sites: http://www.bankrate.com/brm/default.asp http://mortgages.interest.com/content/calculators/index.asp

- Using an internet loan and amortization calculator, determine what the Wright's monthly payment would be for a 30 year loan at 9\% interest.
- Determine what the Wright's would pay in interest over the 30 year period.
- Determine the total cost of the house over the 30 year period.
- What would the monthly payments be if the Wright family chose a 20 year mortgage at $9 \%$ interest?
- How much interest would they pay over the 20 year period?

When the Wright's shopped around for a mortgage they found a lender that would finance their home for 20 years at $7 \%$ interest.

- Determine if this would be a better deal for them.

Total amount to be financed $=$ $\qquad$

|  | Monthly <br> payment | Amount of <br> interest paid | Total <br> amount paid <br> for house |
| :--- | :--- | :--- | :--- |
| 30 year loan <br> at 9\% <br> interest |  |  |  |
| 20 year <br> mortgage at <br> $9 \%$ interest |  |  |  |
| 20 year <br> mortgage at <br> $7 \%$ interest |  |  |  |

Which is the best mortgage for the Wright family?

## What will you need?

Computer
Calculators

## How will you be evaluated?

Charted results and final answer

