


Grade

Grade out of 37 

31.00

Current grade in gradebook

31.00


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X_2


X^2























Well done! You need to improve your calculations of GDSR and your explanations for your choices a bit.

24T
4

31

下午11:41
homes.com

4033 S. Inglenook Way, Ontario, CA 91761

Move In Ready New Home In
Marigold At New Haven Community

\$578,000

4 BR3 BA2792 Sqft

[\\$3262 Estimated Monthly Mortgage](#)[Get Pre-Qualified](#)

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homes.com

4033 S. Inglenook Way, Ontario, CA 91761

\$578,0004 BR3 BA2792 Sqft

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OverviewHome DetailsPricing InfoSchools

Overview

This new construction, quick move-in home is the "Residence 2" plan by Brookfield Residential SoCal, and is located in the community of The Marigold at New Haven at 4033 S. Inglenook Way, Ontario, CA-91761. This inventory home is priced at \$578,000 and has 4 bedrooms, 3 baths, is 2,792 square feet, and has a 2-car garage. The Marigold at New Haven features single family homes by Brookfield Residential SoCal with amenities such as beach, clubhouse, park, and pool. Listing provided by newhomesource.com.

See Fewer ^

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4033 S. Inglenook Way, Ontario, CA 91761

\$578,0004 BR3 BA2792 Sqft

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OverviewHome DetailsPricing InfoSchools

Home Details

Beds
4

Property Type
Residential

Year Built
--

Fireplace
No

Baths
3

Exterior Finish
--

Lot Size
--

Neighborhood
--

Option 1:

What is the price of the house?

\$578,000 ✓

If you wanted to put a 5% down payment on the house, what amount would this be?

 $578,000 \times 5\% = 28,900$ ∴ the amount is \$28,900 ✓

After the 5% down payment, what is the mortgage amount?

 $578,000 - 28,900 = 549,100$ ∴ the mortgage amount is \$549,100 ✓Calculate the payment, "R," if the mortgage is paid **monthly** at an annual interest rate of 4.44% for 25 years.

$$4.44\% \div 12 = 0.0037$$

$$25 \times 12 = 300$$

$$\therefore PV = R \left[\frac{1 - (1+i)^{-n}}{i} \right]$$

$$\therefore R = \frac{PV(i)}{1 - (1+i)^{-n}}$$

$$= \frac{549,100 \times (0.0037)}{1 - (1+0.0037)^{-300}}$$

$$= \frac{3073.406051}{0.000167} = 1830.33$$
 ✓

Calculate the payment, "R," if the mortgage is paid **monthly** at an annual interest rate of 4.44% for 20 years.

$$4.44\% \div 12 = 0.0037$$

$$20 \times 12 = 240$$

$$\therefore PV = R \left[\frac{1 - (1+i)^{-n}}{i} \right]$$

$$\therefore R = \frac{PV(i)}{1 - (1+i)^{-n}}$$

$$= \frac{549,100 \times (0.0037)}{1 - (1+0.0037)^{-240}}$$

$$= \frac{3456.118927}{0.000208} = 16592.5$$
 ✓

What is the cost of the property tax, based on 0.5% of the price of the house?

 $578,000 \times 0.5\% = 2890$ ∴ the property tax is \$2890 ✓

What would your income need to be in order to afford this house (given that you have no other debts)?

$$\textcircled{1} P: 549,100 \div 300 = 1830.33$$

$$\textcircled{2} 3073.406051 - 1830.33 = 1243.08$$

$$\textcircled{3} 0.5\% \div 300 = 0.000167$$

$$\therefore 1830.33 + 1243.08 + 0.000167 \times 100$$

$$\text{gross income} = \$9124.03$$

$$\therefore \text{gross income} = 35\%$$

$$\textcircled{1} P: 549,100 \div 240 = 2287.92$$

$$\textcircled{2} 3456.118927 - 2287.92 = 1168.19$$

$$\textcircled{3} 0.5\% \div 240 = 0.000208$$

$$\therefore 2287.92 + 1168.19 + 0.000208 \times 100$$

$$\text{gross income} = \$3456.12$$

$$\therefore \text{gross income} = 35\%$$

$$\therefore \text{gross income} = \$10160.3$$

$$\therefore \text{gross income} = 35\%$$

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$$\therefore \text{gross income} = 35\%$$

Where is this number from?

$$2890 \div 12$$

Your attempt to use this formula is correct, but you've put the wrong numbers in. The first two numbers would actually be one number, which would be the mortgage payment, and then the taxes should be divided by 12. You need to do this twice, once for the 20 year mortgage and once for the 25 year mortgage.

Option 2:

What is the price of the house (same as above)?

\$578,000

If you wanted to put a 20% down payment on the house, what amount would this be?

 $578,000 \times 20\% = 115,600$ \therefore the amount is \$115,600

After the 20% down payment, what is the mortgage amount?

 $578,000 - 115,600 = 462,400$ \therefore the mortgage amount is \$462,400

Calculate the payment, "R," if the mortgage is paid monthly at an annual interest rate of 4.44% for 25 years.

$$4.44\% \div 12 = 0.0037$$

$$25 \times 12 = 300$$

$$\therefore PV = R \times \left[\frac{1 - (1+i)^{-n}}{i} \right]$$

$$\therefore R = \frac{PVC(i)}{1 - (1+i)^{-n}}$$

$$\therefore R = \frac{462,400 \times (0.0037)}{1 - (1 + 0.0037)^{-300}}$$

$$= 2554.47$$

 \therefore is \$2554.47

Calculate the payment, "R," if the mortgage is paid monthly at an annual interest rate of 4.44% for 20 years.

$$4.44\% \div 12 = 0.0037$$

$$20 \times 12 = 240$$

$$\therefore PV = R \times \left[\frac{1 - (1+i)^{-n}}{i} \right]$$

$$\therefore R = \frac{PVC(i)}{1 - (1+i)^{-n}}$$

$$\therefore R = \frac{462,400 \times (0.0037)}{1 - (1 + 0.0037)^{-240}}$$

$$= 2910.42$$

 \therefore is \$2910.42

What is the cost of the property tax, based on 0.5% of the price of the house?

 $578,000 \times 0.5\% = 2890(\$)$ \therefore the cost the property tax is \$2890

What would your income need to be in order to afford this house (given that you have no other debts)?

$$\textcircled{1} 462,400 \div 300 = 1541.33$$

$$\textcircled{2} 2554.47 - 1541.33 = 1013.14$$

$$\textcircled{3} 0.5\% \div 300 = 0.0000167$$

$$\therefore \frac{1541.33 + 1013.14 + 0.0000167}{\text{gross income}} = 35\%$$

$$\textcircled{1} 462,400 \div 240 = 1926.67$$

$$\textcircled{2} 2910.42 - 1926.67 = 983.75$$

$$\textcircled{3} 0.5\% \div 240 = 0.0000208$$

$$\therefore \frac{1926.67 + 983.75 + 0.0000208}{\text{gross income}} = 35\%$$

$$\therefore \text{gross income} = 8315.49(\$)$$

$$\therefore \text{gross income} = 7298.49(\$)$$

$$\therefore \text{gross income is } \$7298.49$$

$$\therefore \text{gross income is } \$8315.49$$

COMMUNICATION

11 MARKS

Complete the following questions:

Marking Scheme (total 11 marks)

- 2 marks for valid and thoughtful reasons why you chose this house
- 1 mark for each calculation on the differences (total 3 marks)
- 2 marks for each explanation of your opinion on the difference (total 6 marks)

You should also consider location and price.

Why did you choose this house?

Because the beds ~~are~~ have 4, baths have 3, So I can live with my family, and I can invite ~~me~~ my friend come.

For the 5% down payment opinion, what is the difference in the payment amount between paying your mortgage off in 20 years and 25 years? What is your opinion on this difference?
(Hint: Compare Option 1 at 20 years and Option 1 at 25 years)

① 25 years: \$3033.41

② 20 years: \$3456.12

③ $3456.12 - 3033.41 = 422.71(\$)$

④ $3456.12 > 3033.41$

I think 25 years is better, because 25 years require less money each month, and the "R" is less than 20 years.

You should also consider the total amount paid over time.

For the 20% down payment opinion, what is the difference in the payment amount between paying your mortgage off in 20 years and 25 years? What is your opinion on this difference?
(Hint: Compare Option 2 at 20 years and Option 2 at 25 years)

① 25 years: \$2354.47

② 20 years: \$2910.42

③ $2910.42 - 2354.47 = 555.95(\$)$

④ $2910.42 > 2354.47$

I think 25 years is better than 20 years, because 25 years require less money each month, and the "R" is less than 20 years.

You should also consider the total amount paid over time.

What is the difference in the payment based on whether you put 5% down or 20% down? What is your opinion on this difference?

(Hint: Compare Option 1 at 5% down payment and Option 2 at 10% down payment)

① 3% down payment: 28,900

② 20% down payment: 115,600

③ $115,600 - 28,900 = 86,700(\$)$

I think 20% is better, because the house price after the down payment will be lower, and the "R" is less than 3%.

① 2354.47 (3%) ② 3033.41 (3%)

You should be considering the overall amount you're going to end up paying as well. Discuss this, as it might affect your decision.