

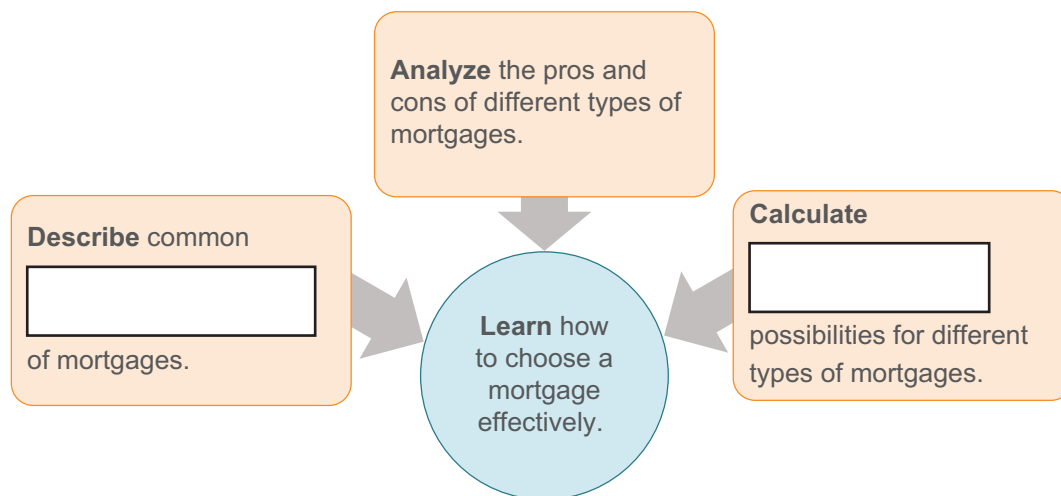
## Warm-Up

## Mortgages and Home Ownership

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Lesson  
Question

## Lesson Goals

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2K

## Words to Know

Fill in this table as you work through the lesson. You may also use the glossary to help you.

	the level of trustworthiness of a borrower
	an event or outcome that happens as a result of previous decisions and actions
	the amount of money initially borrowed as part of a loan
	a legal agreement that determines repayment for a loan used to buy a home or other property

## Warm-Up

## Mortgages and Home Ownership

**Mortgages**

A **mortgage** is a  agreement between a person and a bank.

- A borrower agrees to a loan amount, an , and a payment term.
- The borrower pays the  back over time, usually over many years.

**Mortgages are necessary for most people.**

**Budgeting for Larger Expenses**

:

- can last for up to 30 years or more.
- should make up no more than 20–25% of a budget.

**Mortgages involve careful planning.**

## Instruction

## Mortgages and Home Ownership

Slide

2

**Principal**

In a mortgage, the **principal** is the amount of money initially  from the lender.

This can include:

- the full price of the house.
- additional .

**Sample Mortgage****Home price:** \$300,000**Repayment terms:** 30 years**Principal:** \$300,000**Down Payments**

A down payment is required for most mortgages.

- The down payment amount is determined by the  of loan and your credit score.
- Down payments range from  % of the price of the home.

**Sample Mortgage****Home price:** \$300,000**Down payment percent:** 20%**Down payment:** \$60,000**Fees**

A mortgage often involves additional fees.

- Fees charged by the  for processing the loan
- paid to state or local governments

Components	Cost
Principal after down payment	\$240,000
Origination fee	\$1,200
Closing costs	\$4,800
<b>Total principal</b>	<b>\$246,000</b>
<b>Additional taxes</b>	<b>\$4,000</b>

## Instruction

## Mortgages and Home Ownership

Slide

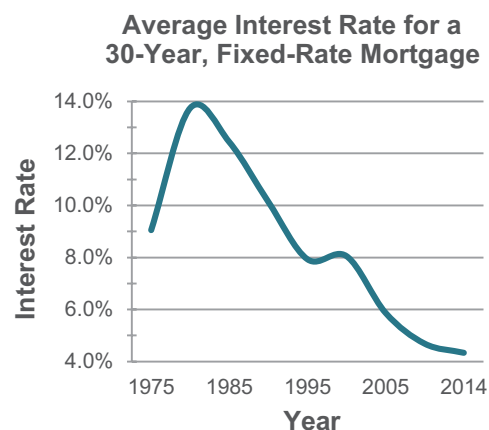
4

**Interest Rates**

The interest rate is the  of borrowing money and is listed as a percentage.

- Average rates  as a consequence of changes in the market.
- Lenders review a borrower's  when choosing an interest rate to offer.

*Circle the interest rate at which it was really bad time to buy a house.*

**Points**

A point is a  fee that a borrower can pay to  the interest rate.

- The cost of a point often equals  percent of the loan amount.
- Points can lower the interest rate in varying amounts.

	Number of points		
	0	1	2
Borrower cost	\$0	\$2,400	\$4,800
Interest rate	5.0%	4.0%	3.0%

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## Mortgages and Home Ownership

Slide

4

**Monthly Payments**

There are many factors that can affect your monthly payment.

- Down payment

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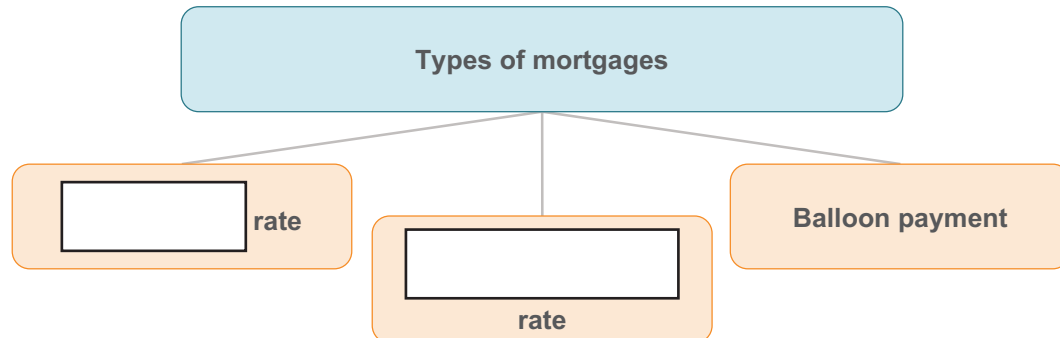
- Loan amount

- Loan

7

**Types of Mortgages**

Mortgages are commonly set up in three different ways.

**Fixed Rate Mortgages**

A fixed-rate mortgage is the  type of mortgage.

- The interest rate stays  through the life of the loan.
- The outside economy does not affect the interest rate or monthly payments.

**Sample Mortgage**

**Interest in year 1:** 4.5%

**Interest in year 15:** 4.5%

**Interest in year 30:** 4.5%

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## Mortgages and Home Ownership

Slide

7

## Calculating a Fixed-Rate Mortgage Payment

Components	Cost
(P) Principal	\$200,000
(R) Monthly interest rate	.4%
(n) Total number of monthly payments (30-year term)	360
<b>(M) Monthly payment</b>	

*Circle the principal in the formula.*

**Formula for monthly payment:**

$$M = P \frac{[R(1 + R)^n]}{[(1 + R)^n - 1]}$$

## Calculating a Fixed-Rate Mortgage Payment

Component	Cost
(P) Principal	\$200,000
(R) Monthly interest rate	.4%
(n) Total number of monthly payments (30-year term)	360
<b>(M) Monthly payment</b>	

*Circle the principal in the formula.*

**Formula for monthly payment:**

$$M = 200,000 \frac{[.004(1.004)^{360}]}{[(1.004)^{360} - 1]}$$

## Instruction

## Mortgages and Home Ownership

Slide

7

## Calculating a Fixed-Rate Mortgage Payment

Component	Cost
(P) Principal	\$200,000
(R) Monthly interest rate	.4%
(n) Total number of monthly payments (30-year term)	360
<b>(M) Monthly payment</b>	

Formula for monthly payment:

$$M = 200,000 \frac{.017}{3.208}$$

## Fixed-Rate Mortgages: Pros and Cons

## Pros

- The interest rate stays the  over the entire term.
- Monthly payments are .
- If interest rates rise on the market, a borrower could benefit by keeping a lower rate.

## Cons

- If interest rates  on the market, a borrower could be stuck paying a  rate.

## Instruction

## Mortgages and Home Ownership

Slide

9

**Adjustable-Rate Mortgages**

An adjustable-rate mortgage (ARM) is another common type of mortgage.

- The interest rate can  on a yearly basis.
- Changes are often tied to Federal Reserve interest rates.
- The amount a rate can change is usually .

**Sample Mortgage**

**Interest in year 1:** 4.5%

**Interest in year 15:** 5.2%

**Interest in year 30:** 6.9%

**The Effect of Adjustments****Before adjustment**

Component	Cost
(P) Principal	\$200,000
(R) Monthly interest rate	.4%
(n) Total number of monthly payments remaining	360
<b>(M) Monthly payment</b>	<b>\$1,059.85</b>

The annual interest rate is  %.



## Instruction

## Mortgages and Home Ownership

Slide

9

## The Effect of Adjustments

## Before adjustment

Component	Cost
(P) Principal	\$200,000
(R) Monthly interest rate	.4%
(n) Total number of monthly payments remaining	360
<b>(M) Monthly payment</b>	

## After adjustment

Component	Cost
(P) Principal	\$187,000
(R) Monthly interest rate	(4.8 → 6.0) .5%
(n) Total number of monthly payments remaining	336
<b>(M) Monthly payment</b>	

## Adjustable-Rate Mortgages: Pros and Cons

## Pros

- Lenders often give borrowers lower  interest rates.
- A drop in interest rates could mean lower monthly payments.

## Cons

- A rise in interest rates would mean  monthly payments.
- Higher monthly payments could mean a larger overall payment.

Adjustable-rate mortgages carry more of a  for borrowers.

## Instruction

## Mortgages and Home Ownership

Slide

11

**Balloon Payment Mortgages**

In a balloon payment mortgage, the majority of the principal is due in  payment.

- The borrower agrees to make regular payments for a  term (often between five and ten years).
- The borrower pays interest and repays some of the principal.
- At the end of the term, the remaining principal is due

**Sample Balloon Payment**

Component	Cost
Principal	\$200,000
Monthly interest rate	.333%
Monthly payment	\$954
Total interest paid	\$52,286
Total principal paid	\$26,296
Remaining payment	\$ <input type="text"/>

**Sample Terms****Loan amount: \$200,000****Regular payment term: 7 years****Fixed rate interest: 4.0%**

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## Mortgages and Home Ownership

Slide

11

**Balloon Payment Mortgages: Pros and Cons****Pros**

- It can allow the borrower to  some of the expense of buying a house.
- It can be a good choice for a borrower who plans to sell the home  the term is over.

**Cons**

- A borrower may  the home and equity if unable to afford the final balloon payment.

**Balloon payment mortgages are useful for certain borrowers.**

# Summary

## Mortgages and Home Ownership

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### Lesson Question

What factors do home buyers need to consider when taking on a mortgage?

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### Answer

Slide

2

### Review: Key Concepts

There are many factors that need to be taken into consideration when buying a home.

#### Components of a mortgage

- Principal

- 

- Fees

- 

- Points

#### Types of mortgages

- rate

- Adjustable rate

- payment

# Summary

## Mortgages and Home Ownership

*Use this space to write any questions or thoughts about this lesson.*