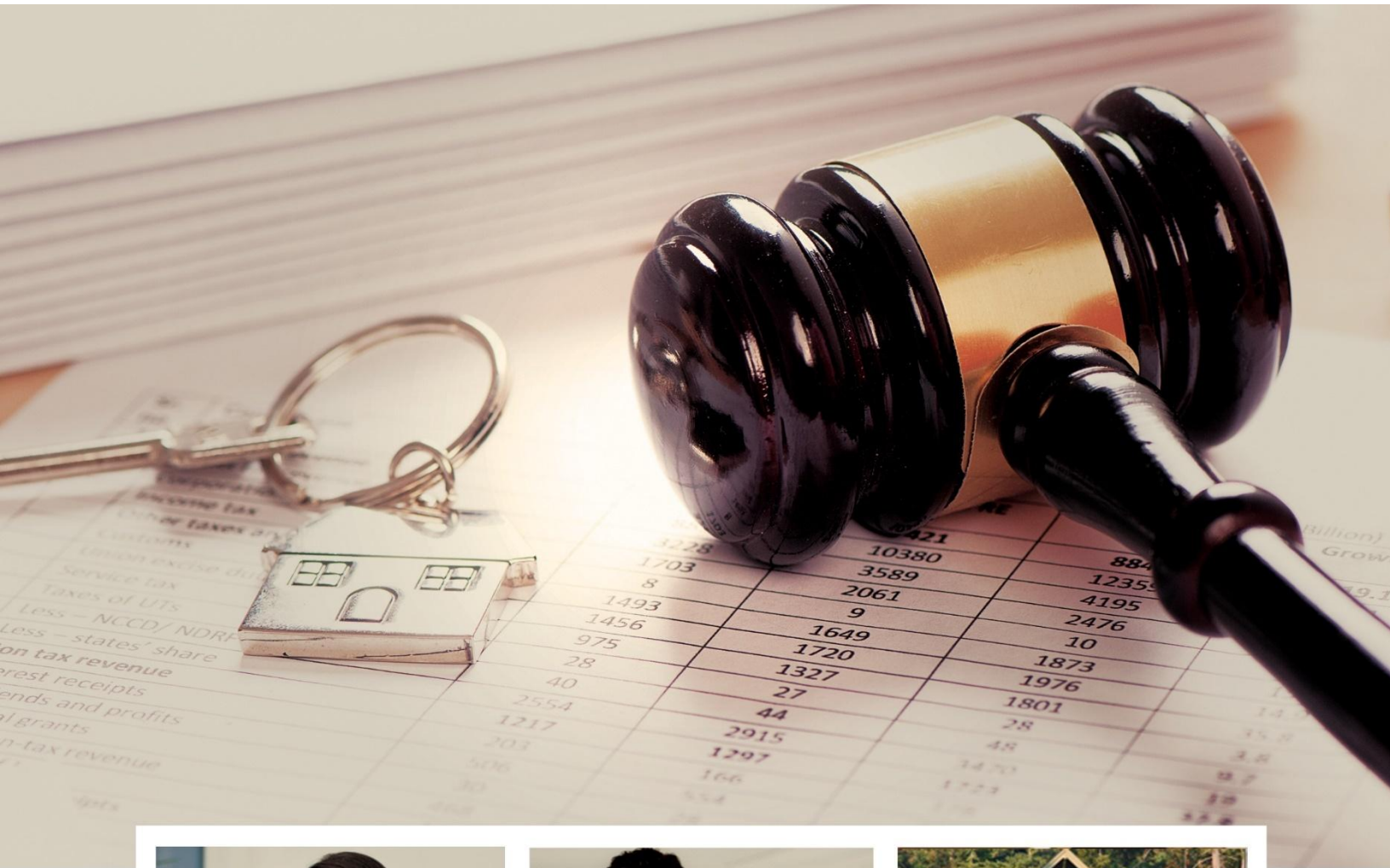




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Real Estate Principles

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Lesson 1: Introduction to Real Estate

Lesson Description

This Lesson begins with an overview of the California real estate market.

Next, we discuss the basic definitions and characteristics of land, real estate, real property, and personal property. This lesson also examines the ways that personal property can be turned into real estate, and vice versa. Then we will discuss how land and property are located, measured, and legally described and identified.

Lesson Learning Objectives

By the end of this lesson, you should be able to:

- 🏠 Describe the difference between land, real estate, and real property



- 🏠 Recognize the difference between real property and personal property
- 🏠 Outline the basic features of the metes and bounds survey method





California's Real Estate Market

Learning Objectives

By the end of this section, you should be able to:

- 🏠 Explain the role of the Department of Real Estate (DRE) and how it oversees the real estate profession in California
- 🏠 Explain how technology has changed the real estate profession and the need to integrate technological innovation into the licensee's practice to ensure quality service to the consumer
- 🏠 Explain to the consumer how the market and California's unique marketing positions have influenced real estate values in California
- 🏠 Explain how California's colorful history have lead to its unique position in real estate values
- 🏠 Define "land" as it pertains to California

Introduction

In this section we will explore how the practitioners in real estate are regulated in California. We will also discuss why technological innovation is so important to the real



estate licensee and to the consumer including having a presence online with domains and search engine optimization. We will also discuss the role of social media in real estate. We will also discuss the factors that have contributed to the very high cost of real estate in California and how California's position as an industry leader in many areas have led to this escalation in values. We will also address California's influence in the United States and the world as an economic power. In addition we will address California's colorful history and how it has influenced the practice of real estate in California. Finally, in this lesson, we will address how real property is basically defined.

Department of Real Estate (DRE)

Most of the oversight of business practices in California is administered by the Department of Consumer Affairs (CDCA). The Department of Real Estate (DRE) operates under the auspices of the CDCA. The mission of the California Department of Real Estate is to safeguard and promote the public interests in REAL ESTATE MATTERS through licensure, regulation, education and enforcement. Information on the Department can be found on the following [website](#).

On this website, the following transactions can be performed using the "eLicensing" system:

1. Acquire testing schedules
2. Check test results
3. Salesperson and Broker License Renewals
4. File Mailing Address Changes
5. Salesperson Changes of Employing Broker
6. Continuing Education Extension/Exemption Requests



Meaningful Technological Changes in Real Estate

Inartistic information is found outside ourselves and, thus, is rigid in form. It is, in general, the "evidence" we use to argue our position. Consequently (providing that you are composing your prose sincerely), there is little (if any) license that you can take with inartistic information—it tends to be either true or untrue. The effectiveness of artistic information, however, depends heavily upon how an author or speaker approaches it. As previously mentioned, it depends upon rhetoric.

Real Estate Buyers and Sellers Start Online

For most home buyers, the purchase of real estate is one of the largest financial transactions they will make. Buyers purchase a home not only for the desire to own a home of their own, but also because of changes in jobs, family situations, and the need for a smaller or larger living area. This annual survey conducted by the NATIONAL ASSOCIATION OF REALTORS® of recent home buyers and sellers provides insight into detailed information about their experiences with this important transaction. Here are highlights from the latest report as of October 31, 2016.

At 31 percent, the primary reason for purchasing a home was the desire to own a home of their own.

First-time buyers made up 35 percent of all home buyers, an increase over last year's near all-time low of 32 percent.

Eighty-eight percent of buyers recently purchased their home through a real estate agent or broker.

Eighty-eight percent of buyers would use their agent again or recommend their agent to others.

Only eight percent of recent home sales were FSBO sales again this year. For the second year, this is the lowest share recorded since this report started in 1981.

Over 90% of homebuyers begin their search online.

REALTOR.com®- Possibly the Most Reliable



The National Association of REALTORS® is the most prominent professional association for real estate licensees and other real estate-related professionals. It was founded in 1913 and is the entity that does speak for most of the itinerants in the profession.

It does award a number of professional designations that entail both educational and experiential requirements in a number of real estate disciplines. It is the organization that underwrites the Multiple Listing Service (MLS) systems that operate in conjunction with their state and local associations. It is a very politically active organization that keeps its 1.2 million members informed of the issues that affect real estate. It is the largest support organization for real estate agents in the nation and the term "REALTOR®" is a copyrighted term and can only be used by licensees who are members. Its website, REALTOR.COM, offers the real estate consumer the most complete offerings of properties and services of any other real estate website available to the consumer.

New Domain Names for REALTORS®

Many real estate agents have been able to successfully increase their exposure both to the public, on social media and maximize their search engine maximization by acquiring domain names for their individual websites. Available domains can be found on websites such as GoDaddy.com and Instra.Com along with individuals who are offering domains that they may have acquired during the Dot Com boom. By simply going on a search engine such as Google and typing in such key words as "available real estate domains", a licensee may be able to find a myriad of options.

Social Media

SOCIAL MARKETING—From the Tech Neanderthal's Perspective

Many agents are confronted with how to implement social media into their marketing plans; especially those who are technologically challenged. In the best of all worlds, social media, a suite of online services that facilitates two-way communication and content sharing, can become a very productive component of an agent's overall marketing strategy.



These services can enhance an agent's online visibility, strengthen relationships with the clients and can expand "word of mouth" advertising which is the best kind of marketing.

Given its rapid rise in popularity and its hundreds of millions of worldwide users, social media marketing can be quite tempting. These tools require minimal up front cash and, theoretically, an agent will find customers and clients flooding through her cyberdoors, ready to buy. It sounds easy and simple but it really isn't. There is much that goes into the decisions on which type of social media to use and how to use it.

DEFINING SOCIAL MEDIA MARKETING

The bewildering array of social media options makes it difficult to discern what they have in common: shared information, often on a peer-to-peer basis. Although many social media messages look like traditional broadcasts from one business to many consumers, their interactive component offers an enticing illusion of one-to-one communication that invites individual readers to respond.

The phrase social media marketing generally refers to using these online services for relationship selling which is selling based on developing rapport with customers and clients. Social media services make innovative use of new online technologies to accomplish the familiar communication and marketing goals of this form of selling.

The established strategies of marketing (such as solving clients' problems and answering the question, "What's in it for me?") are still valid. Social media marketing is the new technique, not a new world.

Social media services can be categorized, but they have fuzzy boundaries that can overlap. Some social media sites fall into multiple categories. For instance, some social networks and online communications allow participants to share photos and include a blog.



The different type of social media services includes the following:

- 🏠 Social-content sharing services: These services facilitate posting and commenting on text, videos, photos, and audio podcasts. Included in this are blogs which are websites designed to let you easily update or change content and allow readers to post their own opinions or reactions.

Examples of blog software are WordPress, TypePad, Blogger (formerly Blogspot) and Tumblr. Blogs can be hosted on third-party sites or integrated into your own website. Microblogging (short message) networks, such as Twitter and Plurk, are often used for sharing announcements, events, sales notices and promotions. In addition there are professional networks such as LinkedIn and Plaxo. Social bookmarking services are similar to private bookmarks for one's favorite sites on the agent's computer. Social bookmarks are publicly viewable lists of sites that others have recommended. These include recommendation services such as Stumble Upon and Delicious and shopping services such as Kaboodle and ThisNext.

- 🏠 Social news services: On these peer-based lists of recommended articles from news sites, blogs, or web pages, users often vote on the value of the postings. Social news services include: Digg, Reddit, and other news sites.

- 🏠 Social geolocation and meeting services: These services bring people together in real space rather than in cyberspace. These include: Foursquare, Loopt, GPS applications that operate on mobile phones and other sites for organizing meetings and tweetups (using Twitter to organize a gathering).

- 🏠 Community-building services: Many comment-and content-sharing sites have been around for a long time, such as forums, message boards, and Yahoo! and Google groups. Other examples include: Community-building sites with multiple sharing features such as Ning, Wikis, such as Wikipedia, for group-sourced content and review sites such as TripAdvisor and Epinions to solicit consumer views.



As one browses online, one can find dozens, if not hundreds, of social tools, apps (freestanding online applications), and widgets (small applications placed on other sites, services, or desktops). These features monitor, distribute, search, analyze and rank content. Many are specific to a particular social network, especially Twitter. Others are designed to aggregate information across the social media landscape, including monitoring tools such as Google Alerts or Social Mention or such distribution tools as RSS or Ping.fm. Book II offers a survey of many more to these tools; specific social media services are covered in their respective books.

BENEFITS OF SOCIAL MEDIA

Social media marketing carries many benefits. One of the most important is that you don't have to front any cash for most social media services. Of course, there is a downside: Most services require a significant investment of time to initiate and maintain a social media marketing campaign. These benefits include:

🏠 Casting a wider net to catch a target market: The audience for social media is huge. In early 2012, Facebook claimed about 800 million active users, half of which log in on any given day. In the same time period, weekly traffic on Google exceeded that of Facebook. Twitter claims more than 100 million users and that 230 million tweets (short messages) are posted daily. A relatively small number of power users, those who post 10 or more times a day, drive a huge number of tweets. About 40 percent of users read tweets only, without posting. More people read tweets than are account for, however, because tweets can be read on other websites.

🏠 Branding: Basic marketing focuses on the need for branding, name recognition, visibility, presence or top-of-mind awareness. An agent will want people to remember his name when they're in need of real estate services. Social media services, of almost every type, are excellent ways to build the agent's brand. Social



media works for branding as long as the agent gets his name in front of the right people. The agent should plan to segment the audience on the large social media services. This segmentation will often lead to more effective branding.

🏠 Building relationships: Social media marketing takes time to produce sales results. It should never be considered a short-term strategy. To build effective relationships in social media, an agent will be expected to: establish her expertise, participate as a good citizen of whichever social media world she inhabits by following the site rules and abiding by the site's conventions, avoid overt self-promotion, avoiding hard sell pressure tactics and provide value with links, resources, and unbiased information. An agent should watch for steady growth in the number of followers on a particular service; the number of people who recommend the agent's site to others; increased downloads of white papers (i.e. property information fliers) or repeat visits to the agent's site. All of these signs will indicate that the agent is building relationships. In the world of social media, the term engagement refers to the length of time and quality of interaction between the agent and her followers. Social media is a long-term commitment.

🏠 Improving business processes: Many clever businesses have found ways to use social media to improve business processes. An agent should consider leveraging social media to: Promptly detect and correct client problems and complaints; obtain client feedback and input new service/product designs or changes; provide tech support to many people at one time; improve service deliveries such as marketing activity reports for sellers or property information profiles for buyers; locate qualified new vendors such as remodelers, roofers, electricians and other vendors tied to real estate; collect critical market information such as median



prices and rate of absorption of inventory; and geolocation services to drive prospects to available properties.

- 🏠 Improving search engine rankings: In addition to optimizing his website, an agent should optimize his social media outlets for search engine ranking. Now that search engines are cataloging Twitter and Facebook and other appearances on social media, an agent can gain additional front page real estate on Google and Yahoo! and Bing (whose search functions have merged). Search engines recognize some, but not all, appearances on social media as inbound links, which also improves the page rank of the agent's site. An agent should use a core set of search terms and keywords across as many sites as possible.
- 🏠 Selling when opportunity arises: Conventional thinking says that social media is designed for long-term engagement, for marketing and branding rather than for sales. However, a few obvious selling opportunities exist, particularly for business-to-consumer companies, that won't offend followers. These can include an agent providing a link to receive her newsletter or an information e-flier on a certain property.
- 🏠 Saving money on advertising: Although time is money the term "free" is the most palatable attribute of an agent on a budget. When an agent is starting up, "free" social media is likely the only advertising he can afford. The agent should construct his master campaign just as carefully as he would a paid one. The agent should: create a plan that outlines target markets, ad offers, publishing venues, and schedules for different campaigns; conduct comparative testing of messages, graphics and offers; monitor results and focus on the outlets that work best at driving qualified visits that lead to conversations; and supplement free advertising with search optimization, press releases, and other forms of free advertising.



CONS OF SOCIAL MEDIA

There are some drawbacks to social media as well. As social media has gained in popularity, it has also become increasingly difficult to gain visibility among its hundreds of millions of users. Sometimes an agent will have to craft a campaign to just build an audience on a particular social media site.

It's quite similar to conducting optimization and inbound link campaigns so that the site can be found on natural search results. An agent should not participate in a social media campaign just because everyone else is.

The major challenge with integrating social media is the time commitment it entails for an agent in order to see results. The agent will need to make an ongoing commitment to review and respond to comments and provide an ongoing stream of new material. An initial commitment to set up a profile is just the tip of the iceberg.

SEARCH ENGINE OPTIMIZATION (SEO)

An agent must note that every search engine has its own rules. She may also need to tweak her terms for not only general search engines but also internal search engines on specific social media services.

An agent should start by reviewing her research for keywords and phrases. Decide on a primary set of four to six terms that best describe the services that the agent offers. Search terms must relate to the content of the agent's website, she may want to reuse other sets of individual posts from her SEO research, mix them up, or include additional terms not optimized on your primary site.

There is certainly more to utilizing social media in an agent's business plan and there are resources to help an agent do this.



California Has Always Been on the Cutting Edge

Very simply put, California has always been ahead of the curve on a variety of national and international issues.

It is the state that is probably most tuned into multi-media platforms that have always put it on the cutting edge of innovation and technology. The most vivid example is Silicon Valley. Other states have made claims as to being the new center of technological innovation but Silicon Valley has stood on its own now for over 40 years as the “place to be for technology”.

The film industry has also contributed to California being a center of technology and innovation as these technologies have been integrated into film production especially in animation and special effects. California is also the financial gateway to Asia with many foreign based financial institutions having bases in the state. In addition, California has more immigrants than any other state. Over 15% of California’s population is immigrants with most coming in from Latin American and Asian nations. California has become the new “Ellis Island”.

It is said that California not only exports creativity and technology to the rest of the nation and the world but also court decisions and legislation. Many other states when trying court cases will often seek out court decisions from California when their own state does not have sufficient judicial precedence established. California also often inspires other state and even federal lawmakers to enact laws to address the changing times. For example the “Godfrey v. Steinpress Decision, CA, 1982” is credited for having killed the Doctrine of Caveat Emptor (Let the Buyer Beware) as a valid defense against the lack of disclosure by real estate agents in transactions. After “Easton v. Strassberger, CA 1984”, California became the first state to pass a law requiring a property disclosure statement on the condition of the property from the seller to the buyer called a “Transfer Disclosure



Statement (TDS)". Most every state now has adopted practices and procedures for providing such a statement to buyers of real estate.

High Cost of California Real Estate

Because of its high profile, not only in the nation but the world, California is a place that many people and companies have a desire to be in. The economy in California maintains a consistent standing of being from the 8th to the 5th largest economy in the world based up on its Gross Domestic Product (GDP).

Los Angeles Harbor is also the largest in the world. California has remained dominant in the following areas throughout the last five decades:

1. High technology and biotechnology
2. Foreign trade
3. Tourism and entertainment
4. Agriculture
5. Professional services

Projections do indicate that California will nearly double the national average in the following:

1. Population increases
2. Job creation
3. Income increases
4. Household formations

Because of these and other factors, demand for real estate is often much higher than it is in other parts of the United States which has made the cost of real estate and housing, disproportionately higher than most other areas of the country.



California is not the only market in the USA where this is the case as some markets along the Eastern Seaboard such as Washington D.C. and Manhattan also have disproportionate values but the markets in Greater Los Angeles and the San Francisco Bay Area often are consistently higher than most any other market. This has created a challenge in the state for having affordable housing which has been an ongoing conundrum for achieving economic stability in the state.

Real Estate: A Profitable Profession

Real estate, is and has been very profitable for many who have participated in the disciplines in investment, development, management, brokerage and financing of it. The very fact that land is a finite resource does ensure that, in the long run, there will be more demand than supply, by itself ensure that real estate values will increase. This, in turn, ensures the continued viability economic sustainability of these services. This is not to say that people don't lose money in real estate either. Many homeowners suffered great losses from 2007 through 2011 when the nation experienced a great recession and accompanying real estate meltdown. But the nation and California recovered because ultimately, real estate is a finite resource.

Historical Influence & California's Colorful History

California's colorful history gives a unique flavor to its customs and lifestyles. The first Europeans to actively settle in California were Spaniards. In 1769, they began the famous mission system along El Camino Real, now known as U.S. Highway 101 and California 1. They established the foreign trading posts, called "Presidios", at San Diego, San Francisco, and Monterey.

The first cities called "Pueblos", were Los Angeles and San Jose. Spain's King granted vast ranchos to favored civil and military officers. Many streets, towns and landmarks in California still bear their names.



The state's distinctive architectural style, the rambling, cool, thick-walled adobe structure with the red tile roof, dates from the Spanish period.

In the early 1800's, California became a self-governing province of newly independent Mexico. The ruling government attempted land reform, breaking up the huge Spanish ranchos and giving ownership to Mexican citizens. This disturbed the large American population in California and led to war with Mexico.

The United States' war with Mexico ended on February 2, 1848, with the Treaty of Guadalupe Hidalgo. As part of the settlement, the United States purchased from Mexico more than 500,000 square miles of land, including the present states of Nevada, Utah, New Mexico, Arizona, and California. In an extraordinary example of political-economic timing, Mexico deeded over all rights to this province within weeks of John Sutter's explosive discovery of gold near Sacramento.

The GOLD RUSH brought thousands of new citizens swarming to the west coast. Many settled permanently, founding towns and businesses, and expanding the already well-established orchards, vineyards, and cattle ranches. Foreign trade crowded the coastal cities with goods and increased immigration. California achieved full statehood on September 9, 1850; and from that time on the state's population increased until it could boast of having the largest population in the nation which is over 12.5%.

The newly established legislature adopted a land ownership recording system that recognized and protected the early land grants. This recording system provides an interesting and complete history of the ownership of California lands and their subsequent division and subdivision.

In 1917, California passed the first real estate licensing law in the nation. Although this first law was declared unconstitutional, the Real Estate Act of 1919 was upheld by the State Supreme Court. Licensing laws are a reasonable exercise by the state to regulate the conduct of its citizens in the interest of the public good.



California Land Ownership

“Property” is defined as the “rights and interests that a person has in the thing owned.” This is commonly referred to as the “bundle of rights”. Some these rights include the possession, enjoyment, control, and disposition.

This theory includes the following:

1. Possession—the right to occupy, rent, or keep others out
2. Enjoyment—the right to “peace and quiet” without interference from past owners and others
3. Control—the right to physically change or keep the property the way one likes it
4. Disposition—the right to transfer all or part of the property to others as the owner sees fit.

Real property is the right or interest that a person has in the land or anything attached to the land.

It is legally defined as:

1. Land
2. Anything permanently attached or affixed to the land
3. Anything incidental or appurtenant to the land
4. Immovable by law

Lesson Summary

Most of the oversight of business practices in California is administered by the Department of Consumer Affairs (CDCA). The Department of Real Estate (DRE) operates under the auspices of the CDCA. Like almost all other businesses real estate has seen its various business models change very rapidly with the implementation of the technology innovations. Communications related to transactions, properties and marketing are now over 90% conducted through e-mail, texting, social media and the web. The National Association of REALTORS® is the most prominent professional association for real estate



licensees and other real estate-related professionals. It was founded in 1913 and is the entity that does speak for most of the profession.

Many real estate agents have been able to successfully increase their exposure both to the public, on social media and maximize their search engine maximization by acquiring domain names for their individual websites. Very simply put, California has always been ahead of the curve on a variety of national and international issues. It is the state that is probably most tuned into multi-media platforms that have always put it on the cutting edge of innovation and technology. It is said that California not only exports creativity and technology to the rest of the nation and the world but also court decisions and legislation.

Because of various factors, demand for real estate is often much higher in California than it is in other parts of the United States which has made the cost of real estate and housing, disproportionately higher than most other areas of the country. California's colorful history gives a unique flavor to its customs and lifestyles. "Property" is defined as the "rights and interests that a person has in the thing owned." This is commonly referred to as the "bundle of rights". Some of these rights include the possession, enjoyment, control, and disposition.





Real and Personal Property

Lesson Learning Objectives

At the conclusion of this section, you will be able to:

- 🏠 Describe the difference between land, real estate, and real property
- 🏠 Recognize the difference between real property and personal property
- 🏠 State the definition of a fixture
- 🏠 Explain the general character of surface, subsurface, and air rights, as well as littoral and riparian rights

Ownership is a Bundle of Rights

The term title refers to ownership rights in real property. Having or holding title means that a person owns interest in the property and is entitled to a bundle of rights. These rights include the right to possession, enjoyment, control, use, and exclusion of the owned property.



In essence, a title represents an owner's bundle of rights and provides evidence that one holds those rights legitimately.

Before covering the definitions and details of modern real property and land use, we will first examine the development of these ideas. We are primarily concerned with present-day land use and the various controls and ownership conditions that shape the contemporary views of property. To understand the modern versions of these ideas, one must understand their evolution. In this lesson, we will discuss the physical and economic characteristics that distinguish land from other commodities and also cover the distinctions between land, real estate, and real property. We will also examine the rights associated with real property and learn the difference between real property and personal property. Within this exploration, we will discuss alterations to land and property and how they can affect whether something counts as personal property or real property.

History of Land Ownership

In medieval Europe, the average person did not own land in the way that we think of someone owning land today. Much contemporary land ownership is what we call allodial, or complete, whereas in medieval times, a kind of abbreviated land ownership was established through a system known as *feudalism*.

Feudalism was a system of land ownership in which all the land in the kingdom was considered to be owned by the head of the state (the king or queen). The king would allow a few lords (the king's vassals) to use some of the land in exchange for taxes and allegiance. The lords, following the same system, would allow peasants or their vassals to live on and work the land in exchange for survival. Within the feudal system, however, the lord did have responsibilities to the vassal, which included the provision of:

- 🏠 A portion of land called a "fief" that was neither given nor sold to vassals, but only loaned for use to provide a return to the "owner"
- 🏠 Just protection under the law
- 🏠 Maintenance of the land



In brief, the lord had to protect the vassal's land interest and guarantee the vassal's quiet occupation. If the vassal became involved in a dispute, then the lord was obligated to defend the vassal in order to protect his land. In return for the use of the lord's land and his broad protection, a vassal had responsibilities to the lord. He was generally obligated to provide certain services to the lord, including military service if the lord became involved in a military campaign.

These services were the means by which the vassal gained his property rights (but not yet ownership) and the protection of those rights.

Allodial Land Ownership

In contrast to feudal land tenure with obligations and duties to the owner, an allodial ownership system is one in which the land is owned completely without an obligation of services or duties to another.

The land is owned absolutely and may be passed to heirs. This sort of complete ownership is commonly called an allodial estate or "fee simple estate" (a concept that will be discussed further in later lessons).

This contemporary concept of land ownership stands in stark contrast to the reciprocal obligations and ongoing relationships under medieval feudalism.

Land, Real Estate, and Real Property

At first glance, the terms "land," "real estate," and "real property" appear to be interchangeable. The technical use of these terms in real estate practice involves subtle but important differences that licensees must understand. Each of these three terms, beginning with "land," builds upon the previous term adding more characteristics. Previously, we discussed the physical and economic characteristics of the three commodities and the traits that set them apart from personal property. Now we must consider the characteristics of each of the commodities individually:

- 🏠 Land—Refers to more than a tract of earth. "Land" is defined as not only the natural resources seen on the surface of the land but the minerals below the



surface and the air above the surface. When a person acquires land, it is possible to acquire all that lies below and above it as well.

🏠 Real estate—Encompasses everything in the definition of “land,” but it adds permanent buildings and structures (known as improvements) to the definition, which basically comprises the land and everything attached to the land. Real estate is also referred to as “realty.”

🏠 Real property—Property ownership includes a set of legal rights, specifically the owner's rights, which deals with the right to control the property, the right of exclusion, the right of possession, the right of disposition, and the right of enjoyment. While “real estate” refers to the land and improvements on it, “real property” refers to both the real estate and the set of rights associated with it.

General Considerations

As a practical convention, real estate licensees do not burden a conversation with the technical distinctions between the three commodities. In everyday use, these terms are interchangeable. While in the field or otherwise discussing land, real estate, or real property, it is not generally important that one differentiate between the three. In fact, we will use the three terms interchangeably in subsequent lessons. It is still important for the student to understand these basic technical distinctions for their own professional education and for the state licensing exam. Land is the land and everything naturally associated with its surface, what lies beneath it, and the air above it. Real estate is the land plus any buildings. Real property is real estate plus the rights of ownership.

Ownership Rights

There are four ownership rights associated with real property: subsurface rights, surface rights, air rights, and water rights. We defined “real property” earlier as covering real estate plus the owner’s set of rights. It is important to understand that these four different rights may be sold separately, sometimes to different persons, thus creating situations in



which multiple people can have an ownership interest in the same piece of property. We will now discuss the details of these various rights.

Subsurface Rights

Subsurface rights relate to everything beneath the surface of a tract. The importance of this right lies largely in the fact that it may secure ownership of mineral deposits located under the surface of a property.

In some states, subsurface rights are sold separately from surface rights. In the event that two parties each hold an interest in a property—one holding the subsurface rights and the other holding the surface rights—the holder of subsurface rights may legally enter the property to extract the minerals he or she has rights to, but he or she must take care to not materially disturb the surface.

Surface Rights

Surface rights are rights and interests with respect to the surface of the earth, including natural elements and structures built on or attached to it.

Air Rights

Air rights are the right to use the airspace above a property. These rights may be sold or leased independently of the tract itself.

Water Rights

When a property borders a body of water or a river, the right to enjoy the water is usually included in the bundle of rights. There are two types of rights associated with waterfront properties: riparian rights and littoral rights.



Riparian rights govern the use of flowing water, such as rivers and streams, that pass through or border a property. In accordance with riparian rights, a property owner does not own the water, but he or she may use the water and shares those same rights and uses with other property owners whose land also borders the water.

“Littoral rights” govern lakefront or seafront property and usually allow the property owner to use the water bordering his or her property. Littoral use does prohibit the property owner from artificially changing the water’s location.

It is important to note that water rights connect to surface rights in that a permanent right to enjoy a body of water surrounded by privately-owned realty usually necessitates surface ownership of waterfront property.

Appurtenances

Appurtenances are all rights, privileges, and improvements that are associated with the property and are usually conveyed with the property by a deed. Appurtenances are not part of the actual property, and may be excluded from conveyance if directly specified in the deed. Appurtenances generally include easements, water rights, parking spaces, and improvements.

Immovable by Law

That which by law is considered immovable is real property. Under California law, established crops and trees are a part of the land. The only exception is when a contract of sale of these items is made before the land is sold. If you have such a contract, it is a good idea to record it at the appropriate county recorder’s office to assure that everyone has the notice of sale.

Personal Property

Property can be thought of in two different terms; either real or personal. Recall that “real estate” is the land, including everything on, under, and above the land. Also recall



that “real property” is the definition of real estate plus the set of owner’s rights associated with it. So, simply put, “personal property” is all that is not covered by real property’s definition.

Therefore personal property includes objects that can be moved such as couches, tables, and clothing (here the student may recall the indestructibility and immobility of land, and note the way that these traits set real estate apart from personal property). Personal property is sometimes also called “personalty” or “chattels.”

Another difference between real property and personal property is the way in which each transfers. Ownership to a parcel of real estate is transferred by a recordable document such as a deed or will, whereas ownership to personal property usually transfers by a bill of sale. A bill of sale is a written agreement used to sell, reassign, or transfer one’s right to or interest in personal property. A deed, on the other hand, is a written instrument used specifically to transfer real property, which the owner (sometimes called the “grantor”) uses to convey ownership in real property to the buyer (or “grantee”).

In the same way that there are subtle differences between the concepts of real estate, land, and real property, there are specific technical terms used to discuss subtle differences in personal property. The term “personal property” actually refers to the theory of *ownership rights* in personal property (like the set of rights associated with real property).

“Personalty” is effectively a synonym for “personal property” but “personalty” refers to the actual, tangible object itself, such as a chair (this distinction corresponds to the way that the terms “real estate” and “realty” identify the tangible buildings and trees associated with a parcel of land, in addition to the land itself). This technical distinction arises only rarely; however, these ideas may shed more light on the nature of real property, real estate, and land, all of which are important concepts for this course.






Severance

It is possible to turn some elements of real estate into personal property. The most common way that real estate is converted to personal property is through “severance.” Severance is the act of separating some element of the real estate from the land. For example, a tree is real estate, but if the owner cuts down the tree, literally severing it from the earth, the tree is now personal property, which can be carried off.

Fixtures

Conversely, personal property can be turned into real estate. This is accomplished by making that personal property a “fixture.” A fixture is a chattel bound to real estate and refers to an object that was once personal property but which has now been firmly attached to the land in such a way that it becomes part of the real estate. For example, a person can purchase wood, nails and paint, which are all personal property. But when the wood, nails and paint are made into a fence on the land, the former items of personal property are now real estate. The items have been transformed from movable personal property into an attached fixture on the land, i.e. real estate.

The most common way to turn personal property into real property is by permanently affixing the object(s) to real estate. Some examples of fixtures are:

-  Elevators
-  Central air conditioning units
-  Garage door openers

Trade Fixtures

When a tenant makes a physical alteration or permanent addition to the property he or she is renting, the altered or added object usually belongs to the landlord upon expiration of the lease agreement. For example, if a tenant installs new kitchen cabinets in his or her apartment, generally speaking, these cabinets are considered fixtures, and thus revert to the landlord’s possession when the lease agreement expires.









One can see how this might impose undue hardship on a tenant who is leasing commercial property because of the large amount of money that many businesspeople have invested in items they use in the course of business and have affixed to the real estate they lease. For example, what if a tenant is leasing a commercial retail property in a shopping mall: Are all the shelving, racks, and cash registers that the tenant installs automatically the landlord's property when the lease expires? Generally, they are not.

Objects affixed to the leased property that are owned by and necessary for the tenant's trade or business are called "trade fixtures," and they are not subject to the same rules of transfer as fixtures in general.

Trade fixtures are items that the tenant owns but has attached in some permanent way to leased (especially commercial) real estate. Trade fixtures remain the tenant's property when his or her lease expires.

Examples of trade fixtures include:

-  Check-out stands
-  Coolers
-  Display shelves
-  Display racks
-  Counters
-  Desks

Courts usually conclude that all trade fixtures are the tenant's property, regardless of the method of installation. Nevertheless, for a tenant to retain ownership of a trade fixture, the tenant must remove the fixture by the last day of the lease. That is to say, a tenant may not leave a trade fixture on a property after the lease has expired and then later request that the landlord relinquish the item.



Determining What Counts as a Fixture

While the exact definition of a fixture varies slightly between states, there are some common attributes that allow us to make some general remarks about what sort of thing counts as a fixture.

All licensees should acquaint themselves with state and local regulations that help to identify fixtures for the type(s) of property with which they work.

When trying to determine whether something is a fixture, we can consider the following issues: annexation, adaptation, and intention.

Annexation

One trait that separates fixtures from non-fixtures is the way the item is annexed, or attached, to the land. Usually, personal property can be removed without the aid of tools or heavy machinery; we can see this in the case of furniture, decorative items, utensils, wall hangings, and the like. With a comparatively minimal amount of effort, one can easily remove, shift, and replace a chattel. This is not the case with a fixture, the removal of which generally involves a great deal of effort and can require professional assistance because of its permanent nature.

Earlier, we mentioned an elevator as an example of a fixture, and it is easy to see how annexation might be used as a criterion for identifying it as such. The installation and removal of an elevator is a lengthy and often costly endeavor, which will probably require the aid of several professionals and a few days of labor. If an owner installs an elevator on his or her property, then unless it needs to be replaced, he or she generally intends to leave it there indefinitely.

Adaptation

As real estate transactions become increasingly complex, so do our definitions of key terms like “fixture.” In the past, the definition of a fixture depended solely on the means



of attachment, that is, annexation. Nowadays, it is important to consider the issue of adaptation as well.

“Adaptation” refers to the use and modification of a particular item for a specific use in a property. If one can show that an item was custom designed for a specific use on the property, then it is likely that the item would be considered a fixture rather than a chattel.

Intention

The most important characteristic to consider when deciding whether something is a fixture is the owner’s intent for that item. Intention is inferred from the nature of the item and blends annexation and adaptation. That is to say, we can look at how the item is attached and the way in which it has been modified to suit its purpose or role in a given property.

From these we can often infer whether the item was intended to be a fixture or personal property. Each case is unique and the individual parties involved in the decision must consider the method and purpose of adaptation and annexation when determining whether something is a fixture. It is often best to ask when unsure and write into a contract what will stay on the property and what is intended to be removed.

Changing Chattels into Real Estate and Vice Versa

Because a chattel can be converted to real estate, and vice versa, the difference between the two can be confusing. The following screens will provide a few more examples and explanations to help you better understand when a thing is real estate and when a thing is personal property.

Trees and Crops

Plants pose a unique challenge when we are trying to judge whether they are real estate or personal property. Are crops, which can be harvested and sold, personal property or



real estate while they are still attached to the earth? What about trees and decorative flora that one could remove - are they chattels or realty?

To decide whether plants are personal property or real property, one must generally consider their use and the duration of their existence. Trees, persistent decorative plantings (such as perennial landscape plants) and uncultivated plants are referred to as *fructus naturales* and are usually considered to be realty because of their permanence. Annually-cultivated crops are called *fructus industriales*, or “emblems,” and are generally considered to be personal property, even prior to harvesting.

Therefore, the broad general rules for making judgments about plants are as follows:

- 🏠 Trees, bushes, and grasses, or *fructus naturales* that do not require annual cultivation are real estate.
- 🏠 Cultivated annual crops, or emblems, are personal property.

Minerals

When substances are still underground, they are considered real estate. But when an owner extracts things from underground and stores them topside, the item is converted from real estate into personal property.

Mobile Homes or Manufactured Housing

Mobile homes are, for the most part, movable. Therefore mobile homes fall into the personal property category. If a mobile home is sold in conjunction with a parcel of land or is permanently attached, then it may be considered real estate. Some states require the home to be connected to utilities and permanently attached to the land in which the owner of the home also owns through a deed or contract for deed filed in the county records as real property.

It is worth noting here that real estate licensees should be familiar with their local real estate laws before attempting to market mobile or manufactured homes. They should



also make sure they are acquainted with any clauses of their state licensing laws that apply to the sale of mobile or manufactured homes, because some states impose special restrictions regarding this type of property. Mortgage lenders as well as insurance companies may have special requirements or may not offer services on mobile or manufactured houses.

Relationship of the Parties

Another element that may influence the status of the property may be the relationship of the party to the property who installed the fixtures. Usually if the item was installed by an owner, it is presumed that their intent was to leave it with the property. On the other hand if the item was installed by a tenant, it is usually presumed that their intent was to remove the item and take it with them.

Agreement

Another element is found in what the parties might agree to. If the seller wants to remove an item that might be considered real property and the buyer agrees, that could affect the status of the item. However, in this instance the buyer would likely require the seller to repair any damage due to this removal be repaired to the buyer's satisfaction.

(Removable - Exception to the Rule)

If an item can be removed without causing damage such as a flat screen television bracketed to the wall, it is usually considered personal rather than real property. The brackets, however, would remain as real property. Conventional wisdom has dictated that it is often best to advise a seller to remove this television from the wall and put it on a stand so as to clarify that the television is personal, not real, property and remove the mounting brackets and repair the cosmetics of the wall after the removal.



Lesson Summary

This section covered the basic definitions and characteristics of land, real estate, real property, and personal property. It also examined the ways that personal property can be turned into real estate, and vice versa.

All land, real estate, and real property have a few characteristics in common. These characteristics are generally broken down into physical or naturally-occurring characteristics and economic or man-made characteristics. The naturally-occurring characteristics that distinguish land, realty, and real property are their immobility, durability, and uniqueness.

Land is a permanent, indestructible, and non-fungible commodity; because land is an integral part of real estate, real estate generally shares many of these traits. The distinguishing economic characteristics of land, realty, and real property are scarcity, alteration, fixity, and situs.

Even though we use the terms “real estate,” “real property,” and “land” interchangeably in everyday conversation, there are important differences that separate these three commodities from each other. Land is an all-inclusive description of the natural environment for the purposes of legal ownership, which includes the Earth’s surface, the space below it, the space above it, and all things naturally attached to it, such as trees and water. “Realty” and “real estate” both identify the land and all items permanently attached to it, including manufactured items such as buildings, sidewalks, and streets. Real property encompasses everything captured by the term “real estate” but also includes the intangible benefits or rights of ownership referred to as *owner’s rights*.

Owner’s rights include the right to control the property, the right of exclusion, the right of possession, the right of disposition, and the right of enjoyment. In essence, real property refers to real estate and the rights to occupy and enjoy that real estate. Personal



property is anything that is not real estate. As a general rule, knowing the method of attachment helps to determine the difference between real estate and personal property.

Real property ownership is divided into four rights—that is to say, there are four basic “aspects” of a property to which the owner has special rights.

These rights are surface rights, subsurface rights, air rights, and water rights, any of which may be sold or leased independently of the others. For example, one person may hold the rights to minerals located under the surface of someone else's home; similarly, a local airstrip might purchase the right to use the air space over someone's home.

It is important to note that water rights connect to surface rights in a unique way. That is to say, a *permanent right to enjoy* a body of water surrounded by privately-owned realty usually necessitates surface ownership of waterfront property.





Methods of Land Description

Lesson Learning Objectives

At the conclusion of this section, you will be able to:

- 🏠 Outline the basic features of the metes and bounds survey method
- 🏠 Locate a parcel of land using the rectangular survey method
- 🏠 Distinguish the vertical method of land description from other survey methods

Lesson Introduction

In this section, we will discuss how land and property are located, measured, and legally described and identified. This process of defining and describing land and real estate is



essential because legal ownership requires that we be able to distinguish the owned piece of land or real estate from all others—otherwise, there would be no clear way to tell what was owned by any particular individual, or what lot was described by any particular deed. The exact boundary of a property can be determined several ways; by metes and bounds, rectangular survey systems, as well as by recorded plats or, sometimes, a pre-existing document describing the property. A less exact, but nonetheless common way to locate a property is informal location reference. We will begin our discussion of land description by considering informal location references.

Describing Land/Legal Descriptions

Legal Property Description

A legal property description makes it clear to all parties exactly what property is being bought or sold. It can be used by the courts to clarify any disputes about the property.

A property's street address provides identification, but it is not enough. It is insufficient because "123 Main Street" might be the address of any given property in any given town that happens to have a street called "Main Street." If we spell out the address further, as "123 Main Street, Anytown, Anystate," this does not tell us the size of the property or the specific boundaries of the property.

Not all properties even have a street address. This requires a legal description, and we need a way of describing property that can apply to all real estate.

A legal property description must include a method of determining the boundaries of the property.

🏠 **Metes and bounds:** A legal land description method identifying a lot's exact dimensions and location in reference to a fixed and permanent monument.

🏠 **Metes:** refers to the distance measurements used in the description

🏠 **Bounds:** refers to the directions of the boundaries that enclose the parcel of real estate.



🏠 **Rectangular survey system:** (also known as a government survey or U.S. public lands survey) Uses a more refined version of the longitude and latitude system of mapping with a surveyed grid of meridians, baselines, townships, and ranges to describe a particular piece of land.

🏠 **Recorded plats:** (also known as the “lot-block-tract system,” the “recorded survey” or the “recorded map”) uses the metes and bounds method of land description to locate the borders of each parcel, and once the surveyor establishes the property’s perimeter, he or she records the dimensions on a plat (map) for easy reference. This map is filed with the proper local authority, such as the county clerk or the county records office.

Given this general overview, the important thing for the reader to remember is a sales contract must contain a legal property description uniquely identifying the property involved in the transaction.

Methods of Describing Real Estate

Informal Location References

For purposes of legal documents the exact size and location of a property requires precise measurements. For everyday commuting and travel, complex legal land descriptions are unnecessary and irrelevant. This is why in everyday use we have a system of informal references that describe location by street.

We can use these informal descriptions when a practical need for simplicity supersedes our need for precision.

Street numbers and place names are all informal references. For example, 1234 Main Street and 123 First Street, Apartment B are informal references, as are districts or titles, such as “Hyde Park” or “Lazy River Ranch.” The advantage of an informal reference point is that it is easy to understand and makes it possible for the layman to locate a home or an office building without the aid of a survey team. The disadvantage, from a real estate



standpoint, is that informal references are not specific enough because they do not describe a particular property's borders.

For a document to be recorded it must contain a specific legal description.

Recorded Plat Method of Land Description

Next to the informal use of addresses and districts, recorded plats are probably the simplest method of land description. They are used when parcels of land, divided up into individual lots, are ready for sale or development.

The term “plat” refers to a surveyor or developer's map detailing the borders of the individual lots that he or she will develop or sell. When a surveyor or developer records his or her plat in the public records office of the county where the land is located, then the map becomes a legal description of property for ownership. The recorded plat system of land description is also called the “lot-block-tract system” and the “recorded map method.” It utilizes the metes and bounds method of land description to locate the borders of each parcel. Once a surveyor establishes a parcel's perimeter using this method, he or she records the dimensions on a plat for easy reference.

To understand how the recorded plat system works, we must understand the “pieces” that make up a plat. Specialized terminology is used to identify these “pieces.” “Parcels” are the individual lots that are combined to make a “block,” and blocks are combined to make a “tract.” The tract is the totality of the property represented on the plat.

When discussing the recorded plat system of land description, it is imperative that these terms are used in only these ways—using the terms carelessly or inconsistently will create confusion. Understand, however, that in other sections and in our daily conversation, a lot or a tract is often the same as a parcel: a piece of land or real estate. This distinction between specialized terminology and everyday conversation regarding the parts of a plat



is similar to the distinction discussed earlier regarding the conventions governing the terms “real estate,” “real property,” and “land.”

Recording a Plat

While the exact recording method depends on the jurisdiction, generally, a surveyor completes the following steps to record a plat:

1. Give each parcel a lot number.
2. Give each block a block number.
3. Give the tract a name or number.
4. Deliver the plat on which all property lines are described by metes and bounds, listing all relevant lot numbers, block numbers and tract numbers to the county recorder's office in which the land is located.
5. The county recorder places it in the map books or survey books, alongside all other tracts in the area.

Metes and Bounds Survey System

In the past, when people wanted to record title to a particular lot they would reference its location relative to some landmark, such as a stream, road, bridge or tree.

This worked well enough for a time, but as our cities grew and property disputes arose, it became necessary to establish more exact descriptions of a property's location. The drawbacks of the landmark system are evident: streams, roads, bridges, and other landmarks change and deteriorate over time. In addition, not all properties are fortunate enough to be favored with a noticeable landmark in their immediate vicinity. To solve this problem, communities developed the metes and bounds system of land description.



Metes and bounds is a legal method for describing land that gives the exact dimensions and location of a lot in reference to a man-made or possibly natural fixed monument. To use the metes and bounds method, a surveyor places a monument in a corner of a parcel; the monument can be a metal pole one to two inches in diameter, or a stone or concrete fixture.

The surveyor then records the parcel's distance and direction from that point by measuring the perimeter of the lot in feet, usually to tenths or hundredths of a foot. He or she indicates direction in degrees, minutes, and seconds.

The sexagesimal system is one form of units used to describe angular measurement. In this system, there are 360 degrees (°) in a circle, 60 minutes (') in every degree, and 60 seconds (") in every minute. Therefore, the directional notation 80°50'32" reads 80 degrees, 50 minutes, and 32 seconds. These measurements provide a way for the surveyor to describe any direction in the 360° circle around the set monument. The monument is described as the point-of- beginning (POB) or the point of commencement for a directional notation because we move clockwise from the monument around a parcel of land describing size in feet and direction in degrees, minutes, and seconds.

Case Study

Developer A establishes the size and shape of each residential lot in her plat using the metes and bounds method of land description. After she gives each lot a lot number, gives each block a block number and gives the tract itself a name, she wants to begin selling the lots to potential homeowners. How can her choice of land description method make the conveyance process easier for both herself and potential purchasers?



Answer: Every deed requires a legal land description. Rather than record the extended metes and bounds description of each lot every time one is sold, Developer A could record the plat itself with the proper local authorities and then refer to the tract, block, and lot number of each parcel in its individual deed. To record her plat, Developer A must take the finished map, with the metes and bounds descriptions labeled, to her county records office. This office will record her plat as a unit among the other plats in the area. The recorded plat method is probably the simplest method of legal land description, although it is not as commonly used as the rectangular plat.

Note: it is not legal in some states to refer to a tract by lot and block until the subdivision plat has been approved and recorded with the county recorder's office.

Compass Directions

The sexagesimal system of degrees coupled with measurements in feet may seem complex. To understand how surveyors use degrees, minutes, and seconds to distinguish direction, and thus location, just place the measurements on a 360° circle marked with cardinal directions, or a compass. Imagine you are standing directly on the monument holding the compass. From this position, you can move outward in any direction from the center of the 360° circle—forward, backwards, or to either side. Whichever way the surveyor chooses to move, surveyors describe that direction relative to two transecting lines: a north-to-south line and an east-to-west line.

Their directions are relative to these lines. Consequently, metes and bounds directions indicate:

- 🏠 Whether we move north or south of an east-to-west transaction through our monument.



🏠 Whether we move east or west of a north-to-south transaction through our monument.

In essence, we give directions relative to a 90° crosshair placed dead center on top of our monument. Using this method, we can also describe complex geometric perimeters, such as arcs. In the metes and bounds survey method, a surveyor uses a compass that contains four 90° quadrants—taken together, these encompass the full 360° of a circle.

Benchmarks

Metal rods and stone fixtures are ultimately no more permanent than a stream or tree, so how do we ensure that no confusion arises in the event that a parcel's monument is destroyed? To compensate for the impermanence of these monuments and ensure that lot dimensions are not lost even if the monument itself disappears, we record the monument's exact location by means of a connection line to a nearby fixed reference mark of known location and elevation as established by a government survey team. These permanent reference points are called "benchmarks" and they generally consist of a marker attached to a durable object.

The marker may be a simple object, like a metal pole, or it may be an elaborate, engraved brass disc placed in cement by the U.S. Geological Survey (USGS) or the U.S. Coast and Geodetic Survey (USCGS). The locations of benchmarks are extremely accurate, usually to less than an inch. Records are kept regarding the locations of all official benchmarks, relative to each other. Therefore, in the event a benchmark is destroyed, it can easily be replaced because the exact locations of all benchmarks are known.

Rectangular Survey System

In 1785 Congress authorized the use of the rectangular (or government) survey system as an alternative to metes and bounds.



Back then, the metes and bounds system would have been extremely difficult to use, given the lack of permanent monuments and the relative difficulty of establishing precise locations. The rectangular survey system provided an easier way to describe newly acquired or surveyed land.

Whereas the metes and bounds method of survey requires a physical monument, the rectangular survey method depends upon the longitude and latitude system of mapping. Longitude lines (meridians) run north to south, segmenting the globe along the Earth's poles, while latitude lines (parallels) run east to west, parallel to the equator. Certain longitude lines serve as principal meridians. For any given principal meridian (a "noted longitude line"), there is an intercepting, specially-noted latitude line, called a "base line."

Every 24 miles north and south of a base line, we name a correction line, or standard parallel. Conversely, every 24 miles east and west of a principal meridian, we name a guide meridian. This method allows for the Earth's curvature. That is to say, a map might illustrate a grid of lines intersecting at 90° angles, but accurately mapping the surface of a sphere requires a slight shifting of our lines. This curved surface requires that the Earth's grid of meridians and parallels be slightly distorted; as one approaches either pole, longitude lines (meridians) get closer together. Every 24-by-24-mile area created by a guide meridian and a standard parallel is known as a "check."

There are 36 principal meridians (with corresponding base lines) in the U.S. public land survey system. Generally, each state will utilize the one principal meridian (north-south) and corresponding base line (east-west) that run through that state as the principal point of reference. Some states, however, do not follow this rule. For example, Ohio uses rectangular plots that are established relative to state boundaries and rivers.

Even if they do not use the principal meridian and corresponding baseline as a general point of reference, states will create a system of ranges and townships, which create a smaller, more detailed grid relative to the larger principal meridian and base line grid.



Ranges

A “range” is a column created by drawing a parallel line every six miles east and west of a principal meridian (north-south). Ranges are numbered consecutively east and west from their respective principal meridians. In essence, these range divisions establish a series of narrower longitudinal lines, adding greater detail that allows us to locate specific parcels of land within a “check.”

The rectangular survey system uses these range columns in conjunction with township lines, which are the more-detailed counterparts of latitude lines. We will now discuss this other component of the rectangular survey system.

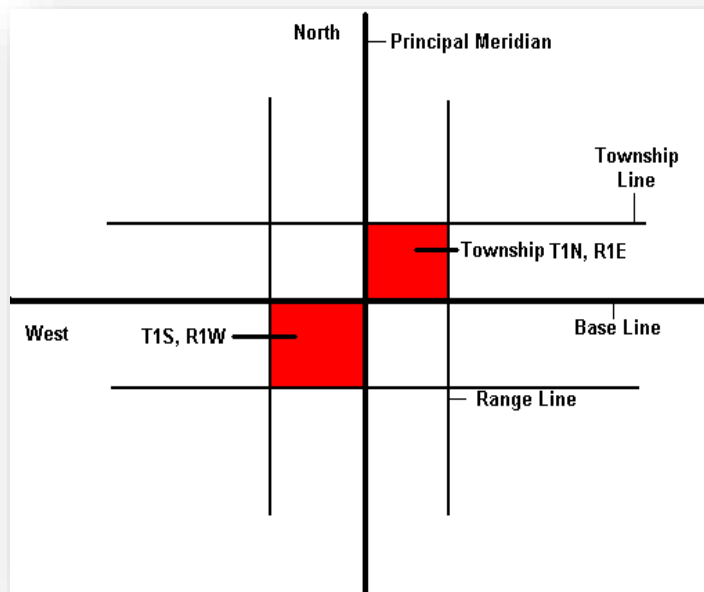
Townships

Just as range columns run parallel to meridians (the north-south longitude lines), township lines run parallel to base lines, thus making the township lines run east-west. These lines intersect with range lines to create 36-square-mile parcels (six-by-six-mile squares) called townships. We number township “rows” consecutively, north and south of a base line. For example, for the first tier of townships lying north of a base line, the entire row is called “Township 1 North” (T1N) and all those comprising the first row south of the base line are dubbed “Township 1 South” (T1S). By attributing the appropriate range column to a specific township, we can identify it uniquely.

For example, “T1N, R1E” identifies a township located on the first tier north of the base line (east-west) and one range column east of the principal meridian. This six-by-six-mile square is thus differentiated from all others on the grid.

This diagram provides a visual depiction of the way that township lines and range columns intersect to form townships. It also shows the way that identifiers like “T1N, R1E” pick out a unique location in a grid of six-by-six mile squares, relative to the base line and the principal meridian.





The Dissection of Townships

Establishing the unique location of a township is, for our purposes, the most difficult part. After that, designations become a little easier. Each 36-square-mile township is divided into 36 individual square mile sections, starting in the upper right-hand corner. Each square mile contains 640 acres, and every acre has 43,560 square feet.

Perhaps you have flown over farmland and seen a visible demonstration of our rectangular survey system. From a plane, much of the Midwest looks like one giant checkerboard.

Concluding Notes on Rectangular Survey

In terms of the surface area surveyed, more U.S. land is defined by rectangular survey than by any other method. In light of this, it is important that licensees understand a few key points about the rectangular survey method:

- 🏠 Not all sections are exactly 640 acres; some are slightly smaller because of the Earth's curvature.



🏠 It is customary to name the county and state along with any rectangular survey title.

🏠 Some rectangular survey descriptions will include fractions; the fraction identifies a portion of a 640 acres area (for example, if you see 1/4, then it means one-fourth of 640 acres, or 160 acres). A fractional designation will generally include notation indicating which half or quarter is meant; for example, "NE 1/4 "picks out the upper right quadrant of the 640-acre square.

California has three reference locations for principal meridians and baselines:

1. Northwestern California—Humboldt Baseline & Meridian
2. Bay Area & Central California—Mount Diablo Baseline & Meridian
3. Southern California—San Bernadino Baseline & Meridian

It is from these reference points that the township and range lines are established in the state. It is important when using the rectangular survey to describe land in California, that the appropriate meridian and baseline point be used in the descriptions. These descriptions will be addressed later in this lesson.

Vertical Land Description

All of the methods we have just discussed are surface identification methods. That is to say, informal methods of land description, rectangular survey, metes and bounds, and recorded plats all distinguish pieces of land in terms of their surface location. While we commonly think of surface description when we consider land distinction, it is not the only way to describe the location and layout of a particular parcel.

Land can also be described according to vertical measurements. You may recall the different types of rights associated with real estate ownership: subsurface rights, air rights, surface rights, and water rights. A vertical land description is most commonly used



when air rights and subsurface rights need specific explication. Vertical land description is also used to express condominium ownership boundaries.

In essence, we create a vertical description by establishing a base point (called a “datum”), from which we move upward or downward marking standard heights or depths (we can imagine this arrangement as something like a very large ruler extending upward or downward from the datum). We reference these heights or depths to denote locations in space. In this way, we can describe land points at any elevation, the air space above a lot, and the minerals below a lot.

Usually the datum used is mean sea level, although some cities or other local jurisdictions utilize a different standard. From the datum, benchmarks are placed at regular intervals established by a U.S. government survey team.

An “air lot” is the space above a particular parcel. To locate a particular air lot, two pieces of information are needed; the location of the parcel of land where the air lot is believed to be and then the elevation (from the point of the datum) of where the air lot is thought to extend. We use the same method to identify individual units in multi-story condominiums and to pinpoint the location of minerals or soil boundaries beneath a particular lot for the purposes of selling or leasing mineral rights.

Contour Maps

Elevation affects development. Consequently, developers need to have a clear picture of the terrain and elevation for a given parcel. A contour map (also called a “topographic map”) is a map in which curved lines (called “contour lines”) connect contiguous points of equal elevation to define the contours of the land.

A contour map shows hills, valleys, plateaus, and other patterns that may affect water drainage or runoff and other development issues.



A developer uses a contour map to determine the need for leveling, grading, and engineering problems that may arise—building upon a slope with a 90 degree angle is difficult.

Reference to a Previous Record

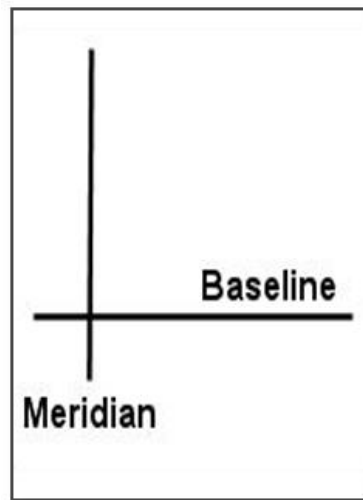
For legal purposes, such as deeds and mortgages, a parcel description must distinguish that parcel from all other parcels in the world; however, a parcel does not need a new description each time it changes hands. Instead, we can reference previously recorded descriptions for the new conveyance. Consider the following example:

Developer C sells a parcel to Owner A. Developer C has already described this parcel using a detailed metes and bounds description and filed it in a subdivision plat located at the county recorder's office. Owner A files the deed giving her title to the property in the public record. Six years later Owner A decides to convey title to Owner B. Already on public record (in Owner A's recorded deed) is a detailed metes and bounds description of the parcel's location. Therefore, there is no need to describe the land's location again.

Rather than employ a surveyor, Owner A and Owner B simply record the new deed, using something like the following phrase: "All land described in Owner A's deed received from Developer C, recorded in (book, page, county, and state)." A seller of real property can typically use and rely on a survey for seven years. After seven years, lenders and title companies generally require a new survey, to ensure the land area has not been compromised by sale or purchase of the land or altered by development, infringing neighbors or natural changes in the land.

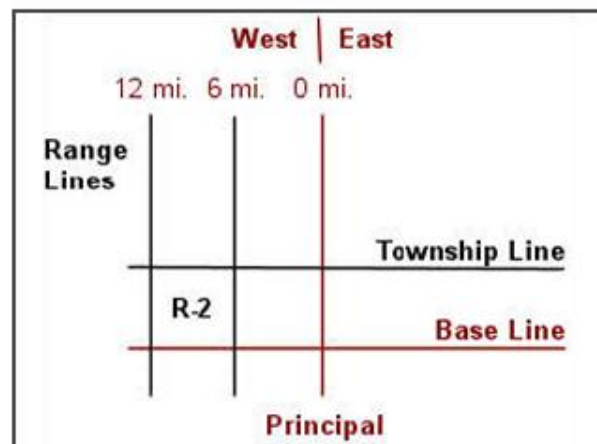


Reading Legal Descriptions



A grid is established with range lines running parallel to the principal meridian at 6-mile intervals on each side of it, and township or tier lines running parallel to the base line at 6-mile intervals north and south of it.

Ranges are bounded by the vertical range lines, the principal meridian being the first. Range 1W is the first six-mile-wide strip of land to the west of the principal meridian. R2W would be a strip of land between six and twelve miles west of the principal meridian.

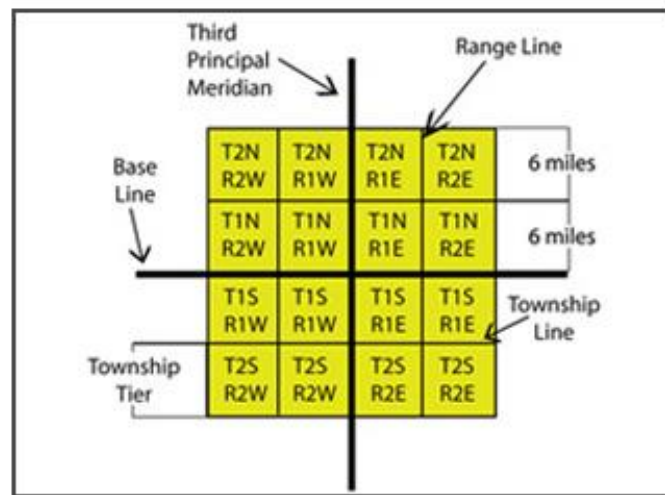


The lines running parallel with the base line, 6 miles apart, are called township lines.



In between the township lines is a strip of land called a township tier. Township tiers are designated by consecutive numbers north or south of the base line.

Example: The strip of land between 6 and 12 miles north of a base line is Township 2 North (T2N).

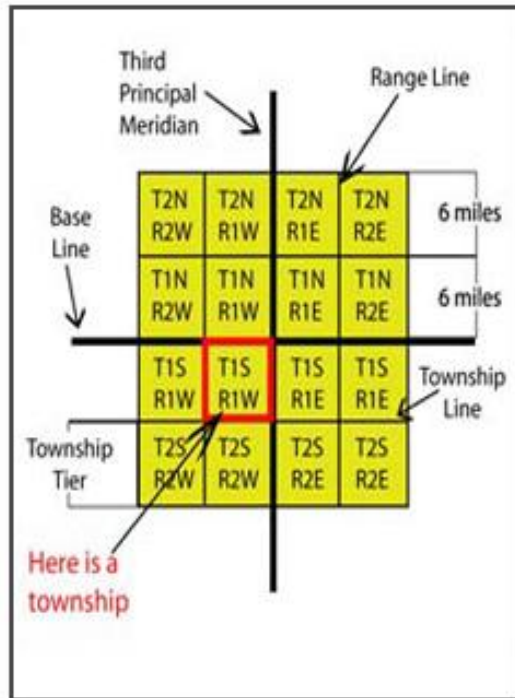


Townships are the basic unit of reference in the rectangular survey system. Any two adjacent range lines and any two adjacent tier or township lines bound a square called a township. Each township is 6 miles square and contains 36 square miles or sections.

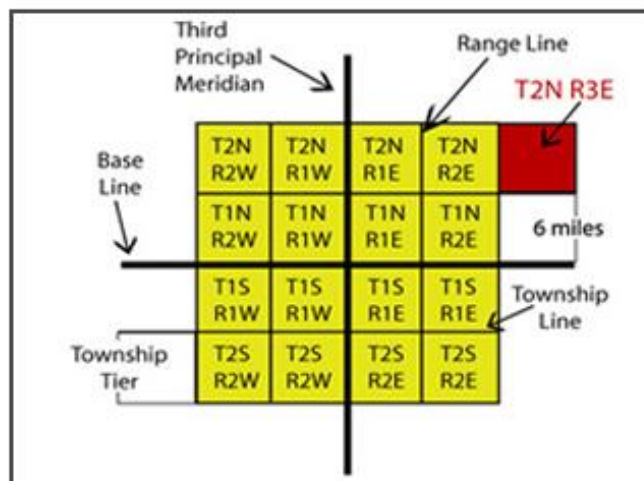
Each township has a legal description based on its principal meridian (and sometimes base line).

Example: "T3N R4W Fox and Maronga River Intersection Principal Meridian (and Base Line)" refers to a 6-mile by 6-mile (36 square mile) township lying between 12 and 18 miles north and 18 and 24 miles west of the river intersection.

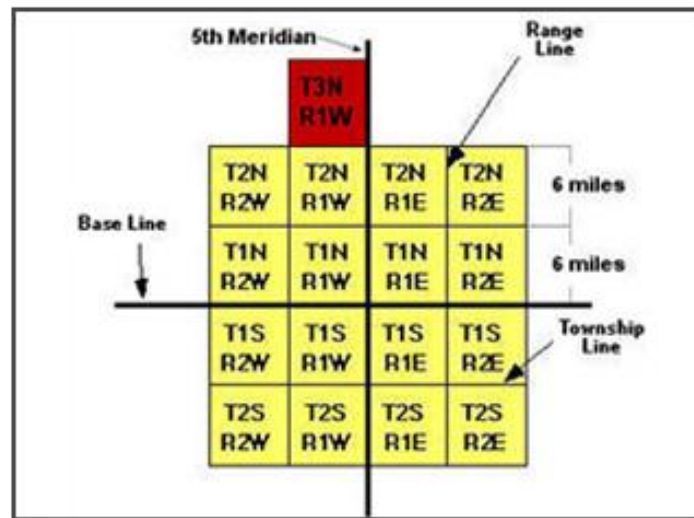




This township is designated Township 2 North, Range 3 East of the principal meridian. This township is the second tier north of the base line. The township is also located in the third range strip east of the principal meridian. Finally, reference is made to the principal meridian because the land being described is within the boundary of land surveyed from that meridian. The description is abbreviated as T2N, R3E of the principal meridian.



This township is designated Township 3 North, Range 1 West of the principal meridian. This township is the third tier north of the base line. The township is also located in the first range strip west of the principal meridian. Finally, reference is made to the principal meridian because the land being described is within the boundary of land surveyed from that meridian. The description is abbreviated as T3N, R1W of the 5th principal meridian.



Townships are squares, 6 miles on each side.

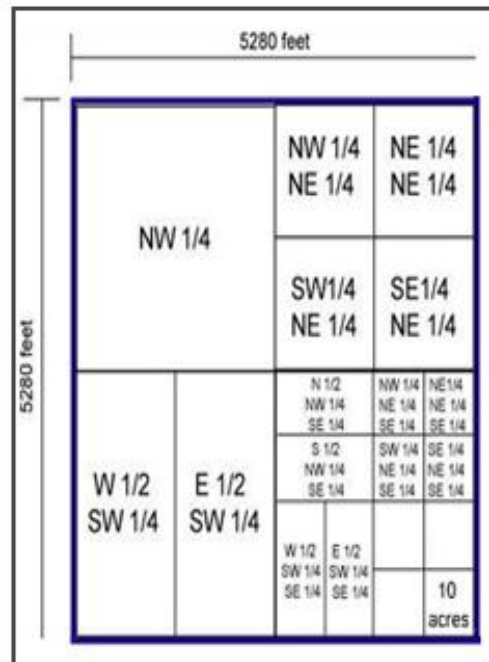
There are 36 square miles in one township. Each township is divided into 36 sections. The sections are numbered from right to left, beginning with mile 1 starting at the (NE) top right hand corner and going through 6. Section 7 lies directly below section 6 and goes back, this time from left to right, to section 12. Directly below section 12 lies 13, and goes, right to left again, to section 18. This continues until all 36 square miles form one township.



Township Line					
6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36
Township Line					

Every section is a square, 1 mile on each side. Therefore, a section equals one square mile. It is also 640 acres. It can be divided into halves, and further subdivided again and again into quarters and smaller tracts until the acreage required is defined.

- 🏠 1/2 section = 320 acres
- 🏠 1/4 section = 160 acres
- 🏠 1/8 section = 80 acres
- 🏠 1/16 section = 40 acres

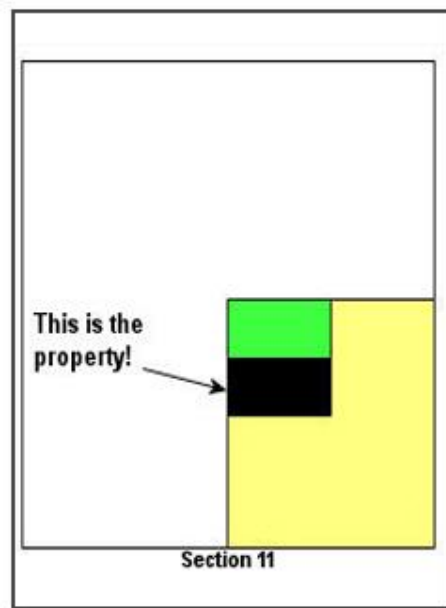


To determine the location and size of a property described in the rectangular survey method, start at the end of the description, read from right to left, and work backwards towards the beginning.

Example: Locate the south 1/2 of the NW 1/4 of the SE 1/4 of section 11.

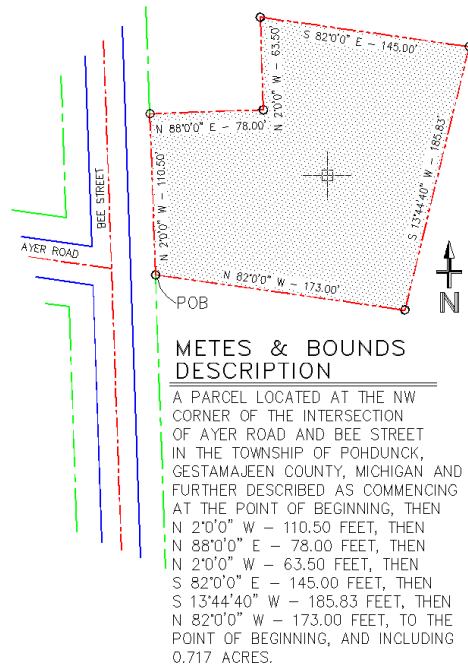
Starting with the section, read backwards to first locate the southeast quadrant (in yellow).

Then find the northwest corner of that area (noted in green), and then divide that area in half to find the property in question in black.

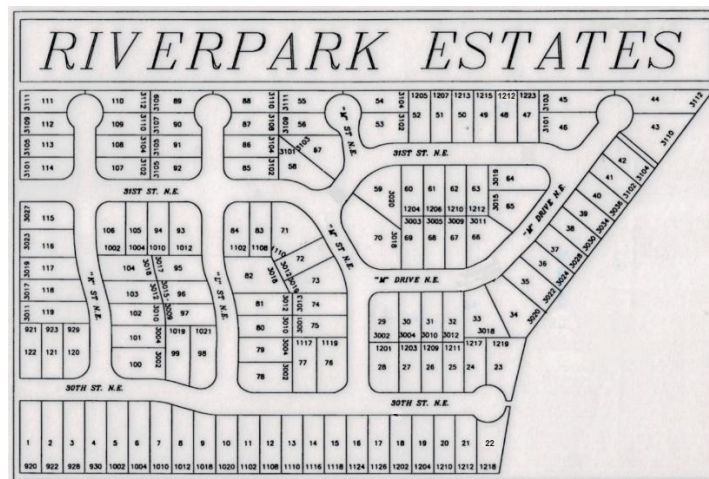


An [example](#) of a metes and bounds:





An [example](#) of a subdivision plat map:



Surveying

Becoming a surveyor is another area of real estate services. Surveying or land surveying is the science of determining points and distances and angles between them. A land surveying professional is called a land surveyor. These points are often used to establish land maps and boundaries for ownership transfers of real estate.

The process of securing your license varies from state to state. In any case, it's important that you understand your state's requirements. You can always contact the National



Council of Examiners for Engineering and Surveying (NCEES) to learn more about the procedures specific to your jurisdiction. Regardless of jurisdiction, the process of obtaining your license is similar throughout the United States.

Lesson Summary

A legal description must distinguish a particular parcel from all other parcels of land in the world. There are, generally, five methods used to establish this legal distinction: metes and bounds, rectangular survey, recorded plat, vertical land description, and reference to a previous record. In this lesson, we discussed all five of these methods, as well as the role of informal land descriptions in identifying particular properties.

Many of these methods for identifying a parcel are extremely complex. For this reason, we developed a system of informal reference based on street addresses, districts, and titles. We use this method when our need for practical simplicity supersedes our need for precision. An informal reference point is advantageous because it is easy to understand; the main drawback of this system is that it fails to uniquely identify a location. For example, there may be multiple properties identified by the address “123 Main Street”—in fact, there could be a 123 Main Street in every city or town that has a street by that name. All of these properties are distinct, but we cannot tell that just by looking at their addresses. In addition, informal references like addresses do not describe the size or shape of the lot, which is necessary for legal purposes.

Metes and bounds is one method we might use to determine a legal land description. It distinguishes the exact dimensions and location of a lot in reference to a fixed monument, usually a small metal rod or a concrete or stone structure one to two inches in diameter. In the event that one of these monuments is destroyed, we record their exact location in reference to a nearby mark established by a government survey team. This ensures that no lot dimensions are lost, even if the monument itself disappears.



A developer using the metes and bounds method will describe direction in degrees, minutes, and seconds using the sexagesimal system, one form of units used to describe angular measurement. In this system, there are 360 degrees (°) in a circle, 60 minutes (') in a degree, and 60 seconds (") in every minute (thus 58°6'34" is read aloud as "58 degrees, 6 minutes, and 34 seconds"). The monument is described as the point of beginning or the point of commencement for the survey description. From this point, we move clockwise from the monument around a parcel of land, describing size in feet and direction in degrees, minutes, and seconds.

The rectangular survey method depends upon the longitude and latitude system of mapping. Longitude lines, or meridians, run north-to-south, while latitude lines, or parallels, run east-to-west. Certain longitude lines serve as principal meridians. For any given principal meridian (a noted longitude line), there is an intercepting, specially-noted latitude line, called a base line. Every 24 miles north and south of a base line, we name a correction line (a standard parallel), which helps to ensure that our grid reflects the curvature of the Earth's surface.

Analogously, every 24 miles east and west of a principal meridian, we name a guide meridian. This creates 24-by-24-mile squares called "checks" that we break down yet further into ranges and townships.

A range is a column created by drawing a parallel line every six miles east and west of a principal meridian; the ranges are numbered consecutively as they move out from the center axis created by the principal meridian.

For example, the first range column to the right (i.e., to the east) of the principal meridian is R1E (first range east), while the first range on the left (to the west) is R1W. The second ranges are R2E and R2W, and so on.

Range columns are used in conjunction with township lines in the rectangular survey system to locate specific parcels of land. Just as ranges run parallel to meridians (longitude lines), township lines run parallel to base lines. Township "rows" are numbered



consecutively, north and south of a base line. For example, the first tier of townships above (i.e., north of) a baseline are identified as T1N, the second tier is T2N, and so on. Township lines intersect with range lines to create a grid of 36-square-mile parcels (six-by-six-mile squares) called townships. Each 36-square-mile township is then further divided into 36 individual square-mile sections that are numbered consecutively starting in the upper right-hand corner. Each square mile contains 640 acres, and every acre has 43,560 square feet.

A recorded plat is a surveyor or developer's map detailing the borders of individual lots in a particular tract. On the plat, the developer will write a lot number for each parcel, a block number for each block (a collection of parcels), and a name or number for the tract (A collection of blocks).

A plat is a legal form of property description only if the developer records it in the public record. Usually, the metes and bounds method of land description is used to distinguish each individual lot.

The vertical land description method is most commonly used when the air space above a lot or the mineral or subsurface rights below a lot require specific description (most likely because they are to be leased or owned by someone other than the owner of the surface rights).

To use this method, we establish a base point, or datum, which is usually mean sea level, and then define heights up or down relative to that base point.

The last method of land description relies on a pre-existing, recorded, and legally distinguishing description. Although legal description must distinguish a particular parcel from all other parcels, it is not necessary to create a new legal description every time a particular parcel changes hands. A deed or mortgage could reference a parcel description in another recorded deed or mortgage using language similar to the following clause: "All land described in the deed from Person A to Person B recorded in (book, page, county, and state)"



Please return to the course player to take the Lesson Quiz.

