

Ag Business
Personal Finances Web Search

Use the internet to research and answer the following questions.

1. Research local banks on the internet. Which one offers the best APY for a 12 month CD? What is APY? List all of the banks you researched.

2. Research a credit card with a focus toward students. What are the fees, credit to qualify, interest rate, or any other reasons for choosing this particular card.

3. On what exchange are the following companies traded? Trimble, Procter and Gamble, DuPont, and Ingersoll-Rand. What does each of these companies produce- be sure to explain any agricultural products.

4. Research stocks and select 2 stocks you will "short sell." Be sure to initiate a short position on those stocks in our stock market game. Why did you choose those stocks to short?

5. Find a brokerage firm that you could work with locally if you want to invest your money in the stock market. What did you choose and why?
6. Find a traditional IRA calculator on the internet and

Ag Business Management

Earning Money

Directions: Read pages 162-164 and complete a web search to answer the following questions.

1. Contrast gross and net pay.
2. Why do you think the federal and state governments take money out of your pay prior to when the tax is due?
3. What is FICA and what is its purpose?
4. What are the mandatory taxes and benefits that the employer must pay?
5. Approximately how much do benefits cost the employer?

6. Conduct a web search to determine the following information
 - a. FICA withholding %-
 - b. Medicare withholding %-
 - c. Illinois withholding %-
 - d. On www.irs.gov print off and complete form W-4 for yourself (claim only yourself as a dependent. Staple W-4 to this paper
 - e. Find publication 15 on the IRS website and determine your federal withholding amount using the wage bracket tables on pages 40-59. Use the scenario below to determine the amount of withholding.

Scenario: You are single and no one else can claim you as a dependent. You earn a base salary of \$30,000.00 per year and are paid bi-weekly. Your employer pays for 50% of your health insurance coverage and the rest is deducted out of your paycheck. Total health care expense is \$450.00 per employee. Deductions are taken out before taxes. Create a fake paycheck stub similar to the one on page 164 showing your income and deductions. You can choose any pay period and do not need to fill in the year-to-date information. Attach the stub to this worksheet.

7. Describe how your state withholding tax would change if you lived in California or Florida.



Name _____

Date _____

Surveying Problem #5 Measuring area

Directions: Calculate the area of the following shapes and record your answers in the space indicated for each problem. Show your work in the space provided, using the back of the page if additional space is needed.

1. What is the area, in acres, for a rectangle that is 1,320 feet by 2,640 feet?

_____ acres



2. What is the area, in square feet, of a rectangular city lot measuring 184 feet long and 92 feet wide?

_____ square feet

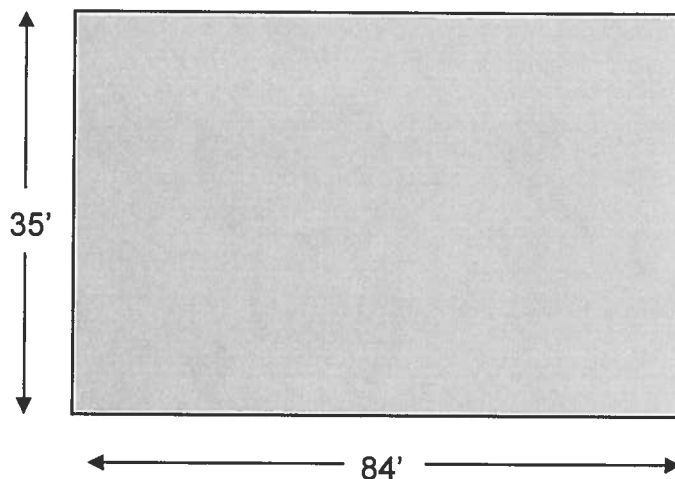


3. A construction crew is preparing a garage floor to be cemented and needs to know the area so they can calculate the amount of concrete to order for the project. What is the area of a rectangular garage floor that measures 24 x 24 feet?

_____ square feet









4. A first-time gardener has decided to fertilize the garden. How many square feet are in the garden diagram?








_____ square feet




















Apps for Agriculture

	<p>Commodity Prices. Track corn, soybeans, wheat, cotton, lean hogs, live cattle, feeder cattle and more. The app has a clean interface and is simple to operate. As one Android Market reviewer commented, it is "dead-on right all day, every day."</p>
	<p>Cash Grain Bids. Simply input your ZIP code to find out cash bids and base levels in your area. Get bids from the five elevators closest to you.</p>
	<p>Weather Underground. There are many weather apps, and this one holds up as well as any of them. Lots of information is available, including temperature, visibility and humidity. View hourly and seven-day forecasts, too.</p>
	<p>USDA News Reader. Create your own news feeds, learn about recovery plans and programs, and easily navigate the massive USDA website in a mobile-friendly environment.</p>
	<p>Virtual Farm Manager. This subscription-based service helps you store, view and log information about your fields. There are many other management apps; this one is notable because it was developed by farmers Jacob Fannik of Max, N.D., and Ryan Raguse of Wheaton, Minn.</p>
	<p>SoilWeb. USDA–National Resources Conservation Service soil survey information at the touch of a button. The app works with your phone’s GPS receiver to identify soil properties anywhere in the lower 48 states where there is cell phone coverage.</p>
	<p>MyTraps. This subscription-based service allows farmers and consultants to place insect traps wherever they want and then track the movement of insect pests across their fields throughout the season. This provides data that helps users to more accurately target their insecticide applications to areas where there are concentrated populations.</p>
	<p>Livestock Manager. A lot of mobile apps are targeted to livestock producers. This particular one allows users to track various information about their animals, including parentage, transport information, medicine administration and more.</p>









	<p>Agrian Mobile. View product labels and material safety data sheets for more than 8,000 crop protection products. Browse usage rates, preharvest and re-entry intervals, worker safety information and more.</p>
	<p>Mix Tank 2.0. Calculate the proper mixing order of tank mix. After determining the tank-mix parameters, you can create field notes on volume per acre, nozzle type, etc., for better record keeping</p>
	<p>Aphid Speed Scout. This app from the University of Nebraska-Lincoln Extension quickly determines if soybean aphids have reached the 250 aphids per plant threshold. Plants are considered "infested" if there are 40 or more aphids on that sample. The app also recommends further scouting or treatment options based on the number of infested plants in a given area. <i>(iPhone, iPad, iPod Touch)</i></p>
	<p>Optimizer 2.0. Farmers can better predict corn yields using this site-specific app developed by Advanced Ag Solutions. Optimizer 2.0 provides farmers with data through a daily text message and a Web login portal. Messages include the projected corn yield and the most limiting factor for their farm. Projections are made based on variety of seed, soil type, weather data and other limiting factors. <i>(Available on most mobile devices)</i></p>
	<p>YieldCheck. Developed by Precision Planting, YieldCheck provides growers with a simple way to calculate and store corn yield estimates. Users can organize estimates based on client, farm and field. They can also see the location of all of their estimates on a map with satellite imagery. For example, users can simply enter kernel counts for three ears of corn and reveal the amount of bushels they can expect this fall. <i>(iPhone, iPad, iPod Touch)</i></p>
	<p>Farm Manager. The Farm Manager app allows farmers to record cropping, livestock, and machinery procedures, and access this information with ease. Users can record full history of crops from when they are sown through to harvested; record chemical and fertilizer use, including type, rate, and date applied; and keep track of machinery maintenance. <i>(iPhone, iPad, iPod Touch)</i></p>
	<p>Nutrient Removal. The Mosaic Co.'s new app provides growers and retailers with valuable nutrient removal data in support of higher yields. Utilizing years of agronomic research, the Nutrient Removal app is a next-generation take on the data previously seen in the "Balanced Crop Nutrition" guide. The app also allows users to test potential yields, generating results that are crop- and region-specific. <i>(iPhone, iPad, Droid)</i></p>
	<p>PrecisionEarth. The PrecisionEarth soil sampling app makes it easier to collect grower, field and soil sampling data. The app uses only open standards so the data you load and the data you export will work with your current GIS, Web and desktop applications seamlessly. Users can load and display directed sampling layers and boundary vectors, export soil sampling location and display background maps. <i>(iPhone, iPad)</i></p>




	<p>Corn Planning Calculator. This app provides real-time useful calculations for the planting of corn from specific inputs resulting in the correct spacing of the corn being planted. Inputs such as population desired, cost per acre, seed counts and spacing in inches or metric format are achieved. <i>(iPhone, iPad, iPod Touch)</i></p>
	<p>Grain Shrinkage Calculator. The Grain Shrinkage Calculator returns the results for the number of bushels after the moisture removal from field to storage for seven common grains: corn, wheat, soybeans, oats, barley, buckwheat, and rye. <i>(Android)</i></p>
	<p>JD Link. This equipment management app from John Deere is a telematics system designed to remotely connect owners and managers to their equipment, providing alerts and machine information including location, utilization, performance and maintenance data to manage where and how equipment is being used. <i>(iPhone, iPad)</i></p>
	<p>FarmPAD. This app from TapLogic allows users to enter farm records, equipment service logs, spray records and take notes or pictures. You can also draw field boundaries with GPS or by hand. Sync to your Web account where you can print reports, review history and draw and print field maps. <i>(Android, iPhone, iPad)</i></p>
	<p>Dynamic Pricing Platform (DPP). This mobile app allows farmers the ability to view cash grain prices, basis levels and to make, manage, and monitor firm offers at their convenience. <i>(Android, iPhone)</i></p>
	<p>CropNAction. cropNAction is a virtual social network for farmers to share information, images of their crops and track agriculture trends in their region. The app has been recognized by CropLife America and has received the AgGateway Information Technology Innovation Award. <i>(Android, iPhone)</i></p>
	<p>Soil Test Pro. Developed by TapLogic, this GPS-enabled app makes soil sampling for the farm easier than ever. Features include unlimited access to FarmLogic's precision ag specialists, aerial imagery of all maps, and test results in 5-7 days. <i>(Android, iPhone, iPad)</i></p>
	<p>FieldView. This app extends the functionality of a 20/20 SeedSense monitor from Precision Planting. FieldView functions as a second display in the cab, so users can view real time, row-by-row maps of their planter's performance. Then, when planting is complete, simply remove the iPad from your cab and have all of the 20/20 data with at your fingertips. <i>(iPad)</i></p>








	<p>Seed to Harvest. A complete crop and field record-keeping tool designed with the small organic farmer in mind. Key features include: Record detailed planting information including cultivar, location, amount, date, and an unlimited number of transplanting records. Track inputs, harvest records, and sales by cultivar and location. Generate complete PDF reports of crop and field activity. Internet access is required to generate reports.</p>
	<p>ScoutPro Corn. The app allows users to scout and identify weeds, insects, disease and disorders while in the field. Users are then able to upload important field data, images and notes to generate field specific scouting reports.</p>
	<p>Crystalyx BCS. The app offers the ability to snap profile pictures of your cows and compare them to reference photos of cows that represent Body Condition Scores from 1 to 9.</p>
	<p>TX Range ID. The Guide provides a listing and details of all 129 plants in the application. Each plant includes a detail page with information such as the common and scientific name, a pronunciation guide for the scientific name, a short description of the species including the growth season, native or non-native status, and the wildlife and grazing value.</p>
	<p>Beef Cattle EPDs. The Beef Cattle EPD Resource Guide App has been created to be used as an educational tool. Establishing a basic beef cattle genetics education is important to help producers make more educated breeding decisions. Establishing a basic EPD education can lead to the understanding and implementation of new DNA technology in the beef industry.</p>
	<p>Weed Manager Plus. Featuring a mobile version of the Crop PHD tool, this app delivers accurate weed management recommendations for your region, a tank mixing tool and a measurement conversion calculator for commercial farmers.</p>
	<p>NutriAg. Check to find out what products are compatible with the Tank Mix Compatibility tool, use our Deficiency Chart to find solutions for nutrient deficiencies in your crops, or find information on our products.</p>
	<p>DTN/The Progressive Farmer. Get the agriculture industry's most powerful content app specifically designed for the iPad. This app meets your information needs with access to award-winning agriculture news, commodity market data, and industry-specific weather intelligence.</p>
	<p>Ag PhD. The Ag PhD Field Guide helps you to identify problem pests out in your field. You can browse weeds by name or by photo. The Ag PhD Field Guide also gives you the most up-to-date agronomy information through the FMC HatchTrak newsletter and the Ag PhD University.</p>

	<p>AGRIplot allows you to plot any area on a map. Simply walk around your property and add a landmark point, or drag and drop pins anywhere on the map. AGRIplot will automatically calculate the area enclosed by the points and provide the distances between each point. Interest points allow you to identify additional features for your plot. You can even take pictures associated with each landmark or interest point for a visual representation.</p>
	<p>Agro Lite allows Agronomists to create and email paddock/field inspection reports while on farm, have it distributed there and then. Eliminating trips to the office to type up reports. Add your clients details, chemical requirements, crops and pests. Once this is done they are all at your fingertips every time you visit a farm to complete an inspection. Inspections are kept static, forming the basis of the legally binding document, that is signed by both parties direct on the device.</p>
	<p>ArcGIS is a great way to discover and use maps. Maps come to life in ArcGIS. Tap on the map or use your current location and discover information about what you see. You can query the map, search and find interesting information, measure distances and areas of interest and share maps with others. Find community hosted maps from ArcGIS Online – ESRI's online GIS. Alternatively you can use the authoring tools on ArcGIS.com to create your own maps that can be used in ArcGIS.</p>
	<p>ARMtech Application is designed for use by both agents and policyholders of ARMtech Insurance Services, Inc. With the application, you may quote available insurance products, open claims, view actuarial changes, reference Special Provisions of Insurance, track commodity prices, and even stay on top of current Insurance News and Agricultural Headlines. ARMtech provides secure logins for account holders, which allows insureds to view their personal policy information and allow agents to view their entire customer database.</p>
	<p>Commodity is a free mobile price watcher for oil, gold, gasoline, natural gas and other commodities. Are you curious about the current price of oil? Want to see if gold can continue its record 5 year run? Then this app is for you!</p>
	<p>Corn N Rate Calculator. This app is designed to assist producers in selecting a Nitrogen (N) rate that improves profitability when N and corn prices fluctuate. Maximum return to N (MRTN) is the N rate that will be most profitable for a particular N:Corn price ratio.</p>
	<p>Documents To Go – Office Suite. Looking to access your Microsoft Office ® files at any time? All you need is your favorite iOS device and Documents To Go to be constantly connected!</p>
	<p>Dragon Dictation is an easy-to-use voice recognition application powered by Dragon® NaturallySpeaking® that allows you to easily speak and instantly see your text or email messages. In fact, it's up to five (5) times faster than typing on the keyboard.</p>

	<p>Evernote is an easy-to-use, free app that helps you remember everything across all of the devices you use. Stay organized, save your ideas and improve productivity. Evernote lets you take notes, capture photos, create to-do lists, record voice reminders--and makes these notes completely searchable, whether you are at home, at work, or on the go.</p>
	<p>Farm Futures. The power of Farm Futures magazine in an app! This enhanced mobile presentation of the leading management oriented farm magazine features enhanced user-customized markets, market commentary, news and audio updated every business day.</p>
	<p>Farm Progress. The app automatically directs you to the right local Farm Progress website, or you can choose your favorite. The app offers access to American Agriculturist, California Farmer, Carolina-Virginia Farmer, Dakota Farmer, Indiana Prairie Farmer, Kansas Farmer, Michigan Farmer, Mid-South Farmer, Missouri Ruralist, Nebraska Farmer, Ohio Farmer, Prairie Farmer, Southern Farmer, The Farmer, The Farmer-Stockman, Wallaces Farmer, Western Farmer-Stockman and Wisconsin Agriculturist.</p>
	<p>Search Fastline Publication's entire listings database from your mobile device. Find agricultural, trucking, construction equipment quickly. Get equipment values, find dealers, and see current commodity prices.</p>
	<p>Flipboard creates a personalized magazine out of everything being shared with you. Flip through your Facebook newsfeed, tweets from your Twitter timeline, photos from Instagram friends and much more.</p>
	<p>GO TEXAN is here to help. The free GO TEXAN app for iPhone helps you discover restaurants, wineries, farmers markets, pick-your-own farms, florists, nurseries, retailers and other businesses offering Texas products and services. The app also gives you access to Texas recipes, events, coupons and more.</p>
	<p>The Farm Progress Growing Degree Days application measures the maturity of your crop by viewing current and past growing degree days data for your farm's location. Growing degree days (GDD) are a measure of heat accumulation used in agriculture to predict the date that crops will reach maturity.</p>
	<p>iCrop Trak. Track crop quality, estimated yield, pests, diseases, farm labor, material and equipment use. Keep a record of any farm related variable (forms and measurements are completely customizable) through a map based visualization. The application uses a forms plus GIS approach.</p>

	<p>iPlanta. The calculator solves for the amount of pesticide, land, or plants based on the information provided. The user chooses to input either US or metric units, but the end calculations are given in both unit systems along with a timestamp and the ability to email the results with the touch of a button.</p>
	<p>With the iRanch App, you can individually purchase a series of interactive ranch calculators (stocking rate, fed hay predictions, embryo calf breakevens, calf crop breakevens, annual cow cost, cow supplementation, and horse supplementation), which allow you to manipulate input values unique to your ranch for custom output values</p>
	<p>N Price Calculator. This app allows you to compare the price of various forms of nitrogen fertilizer products in terms of their price per pound of nitrogen. The app then lets you add the price to a list of prices on a separate screen. In this manner, you build a price list to compare.</p>
	<p>Numbers is the most innovative spreadsheet app ever designed for a mobile device. Built from the ground up for iPad, iPhone, and iPod touch, it lets you make compelling spreadsheets in minutes — with tables, charts, photos, and graphics — using just your fingers.</p>
	<p>Spray Lite. * Replaces the manual spray log * Records & Stores Spray sheets in one place * Export data in CSV format * Stores Chemical details * Stores all historical chemical applications * Filing Cabinet in the iPad * Live feed of information from the operator as it happens</p>
	<p>The DuPont TankMix Calculator Application allows you to easily calculate the amount of product you will need to treat a specific field area, the amount of product you need to apply to a specific tank size, the amount of water you'll need to treat a specific field area or the amount of product you need to get the desired Volume to Volume ratio.</p>
	<p>The Weather Channel. Looking for the most accurate weather information available? The Weather Channel's staff of 200+ meteorologists, along with our patented ultra-local TruPoint(sm) weather technology, allow us to provide you with the weather tools you need to plan your day, week, or even the next hour.</p>
	<p>Units is a really useful app that lets you easily convert from various units into lots of others. Units can convert hundreds of units from 43 different categories including Speed, Time, Length, Volume, Area, Power, Temperature, Fuel Consumption, Clothing & Shoe Sizes and loads more!</p>

	<p>The Variety Selector Tool from Bayer CropScience helps you find the right variety for your field and calculate all of your cottonseed needs in a single application. Great for growers, seed dealers, consultants and agronomists, the Variety Selector Tool lets you:</p> <ul style="list-style-type: none"> • Compare and evaluate seed varieties • Choose the right variety for your fields • View variety images and growing videos • Input the seeding rate for each variety • Calculate acres per bag • Determine total bag/box needs
	<p>Connected Farm. Uses your phone's GPS for mapping field boundaries, locate irrigation pivots, marking flags, and entering scouting information for points, lines, and polygon areas. Scouting attributes include an extensive list of weeds, insects and diseases, and allows you to log the severity of a problem, crop conditions, and more.</p>
	<p>AgIndex. From Monsanto Company, get all the markets, weather, news and agronomic advice you want, in one quick-to-read dashboard. Receive push notifications customized to your location and crop portfolio to keep up with changes in commodity pricing and insect alerts. agIndex turns your smartphone or tablet into a complete agronomic information source, so you can stay fully informed while in the field or on the road. Brought to you by Asgrow®, DEKALB® and Deltapine® seed brands.</p>
	<p>DEWALT® Mobile Pro™. From Infinity Softworks, is a full-featured calculator and reference tool designed especially for construction pros. It comes with a construction and scientific calculator plus calculator templates for area, length, and volume, as well as estimating studs, drywall, and concrete slabs.</p>
	<p>Flashlight. From John Haney Software, Flashlight uses the LED light on iPhone 4 and fills your screen with bright white light to illuminate your world when you find yourself in a dark spot or concert. Includes fully customizable special effects including: Magnifying Lens, Fireworks, Strobe Light, Trippy, S.O.S., Yin-Yang, Halloween, Candy Hearts, Holiday Lights, Photos, and more!</p>
	<p>iHerd. From iApps Pty Ltd, provides the user with lifetime traceability of the herd such as treatments and location movements and is a more simplistic approach than other tiresome software which requires information to be recorded in the paddock and then entered manually into the computer.</p>
	<p>Aerial Sprays. From USDA, We are responsible for conducting and reporting research that supports the nation's aerial applicators, who in turn, work with farmers and other producers to protect and supply the nation's food and fiber crops. To make the most efficacious application to a field or orchard, aerial applicators select specific operational parameters (such as spray nozzle type, spray pressure, airspeed, etc...) that will result in spray droplet sizes that produce maximum on-target deposition of the applied product with minimal off-target movement.</p>
	<p>Baker Hughes Rig Counts. From Baker Hughes Incorporated, This is an interactive map application of Baker Hughes' US rotary rig counts. The Baker Hughes Rig Counts are an important business barometer for the drilling industry and its suppliers. The active rig count acts as a leading indicator of demand for products used in drilling, completing, producing and processing hydrocarbons. The US rig count is released weekly at noon central time on the last day of the work week.</p>

	<p>Angus Mobile. American Angus Association The Angus Mobile app has been created by the American Angus Association and is designed for anyone with an interest in Angus Cattle. The app contains several features all in an easy-to-use format. Below are a few of the features:</p> <ul style="list-style-type: none"> - Angus members have access to their AAA Login herd data and the ability to enter calving book records from the field - Flexibility to tailor the app for your needs for your most used functions with a Configuration option. Simply drag and drop your favorite icons to the toolbar
	<p>Vector Sprays. From USDA, provides users with a quick, easily searchable interface that returns droplet size data for the specified operational setup. The database is structured such that users are requested to select specific operational parameters which include:</p> <ul style="list-style-type: none"> - Company Name (of the spray system used) - Spray System (model number) - Solution Type (carrier solution used) - Additive/Insecticide
	<p>Event Farm. From Volta Live, Inc. is used for check-in and guest registration at events. The application can be used in conjunction with the web-based Event Farm Ticketing and Guest Registration System or can be used on its own for users that simply want to upload a guest list.</p>
	<p>Herd – Animal and Livestock Management. From John JR Scott, helps you track your animals, presenting them clearly and efficiently on your iPhone, iPad or iPod Touch. Information tracked by Herd:</p> <ul style="list-style-type: none"> ● Animal identifier (usually government mandated), ● Name (your personal identifier), ● Sex,
	<p>SMM WildFlowers. By Tony Valois, this App offers both novice and advanced wildflower enthusiasts the opportunity to identify common and rare plants while exploring remote areas of the Santa Monica Mountains. Visitors can chose several basic flower characteristics on the App's interface like color, size and shape.</p>
	<p>Fertilizer removal by Crop. By Ag PhD, this application is a great reference for you as you plan fertilizer applications on your farm. Simply select your crop and the desired yield for that crop, and you will be given the amount of vital crop nutrients that your desired yield will need. Results can be saved within the app and e-mailed to yourself or your agronomist for later reference.</p>
	<p>SpraySelect. By TeeJet Technologies, this App allows you to quickly and easily choose the proper tip or nozzle for your application. Just enter speed, spacing and your target rate, Select your drop size category and you have a list of tips that will work for your application. The right nozzle is just a few seconds away.</p>

	<p>MySci Pubs. By Bravura Technologies, Get the best knowledge in the agronomy, crop, and soil sciences. Search thousands of peer-reviewed journal articles. Access full text right on your device. American Society of Agronomy, Crop Science Society of America, and Soil Science Society of America.</p>
	<p>Water Cost. Texas A&M AgriLife Extension Service, calculates cost per acre and acre-inch of irrigation applied by entering fuel meter readings, hours of operation, gallons per minute, acres covered and cost of fuel per meter unit. Additionally, it calculates the acre-inches applied per acre.</p>
	<p>Water-Calc. Texas A&M AgriLife Extension Service, Water Calc assists irrigators in the High Plains Underground Water Conservation District calculate their water use based on the alternative method established by the district. By entering beginning and ending fuel meter readings, the fuel type and county, a producer can calculate the acre inches applied for annual reporting purposes.</p>
	<p>Crop Cost. Texas A&M AgriLife Extension Service, designed to help agricultural producers calculate their cost of production per crop unit to assist them in executing a successful marketing plan. The application is set up to calculate the variable and total cost of production per unit for cotton, corn, sorghum, peanuts and wheat.</p>
	<p>TankCalc US. By Syngenta Agro AG, is a unique tool for easy and efficient calculation of filling plans for spraying. It saves time and ensures high accuracy in the tank mixing based on area, tank size, product, dosage and driving speed. The application uses the United States customary system of measurement. The TankCalc has features like:</p> <ul style="list-style-type: none"> • Filling plan with the amount of products, water and number of tanks • Summary with the total consumption of products and water • Recommendation for choice of ISO nozzles • Special features minimizes filling - and driving time
	<p>Invasive Plants in Southern Forests. By Charles T. Barger, is a field guide for the Identification of Invasive Plants. Invasions of nonnative plants into forests of the Southern United States continue to go unchecked and only partially unmonitored. These infestations increasingly erode forest productivity, hindering forest use and management activities, and degrading diversity and wildlife habitat.</p>
	<p>TractorHouse. By Sandhills Publishing, the most trusted name in information processing for the construction, farming, trucking, aviation, and computer industries for over 30 years.</p> <p>Features:</p> <ul style="list-style-type: none"> - Select category - Select manufacturer – scroll or search - Select model or model group – scroll or search