

# Give your student the edge

**Insight™ Technical Education** provides high quality self-directed learning materials and tools for introducing vocational, technical, and professional fields and for life enrichment.

Career

Insight Technical Education specializes in developing books and educational materials that will aid in developing professional and personal skills that will be of benefit

Confidence

today and in the future. Insight Technical

Skill

Education also offers tools that support the educational materials. We are growing and in the process of writing new books continually. Our books are written by various authors that are experts in their fields. The other products that we offer are the best possible value.

Vision

The books and materials published by Insight Technical Education are specifically

Dexterity

designed to be used in a self-paced, self-directed manner, or with minimal educator involvement. The intent is to learn by doing, a genuine hands-on approach to learning.

Success

The materials offer quick success that builds confidence and the lessons progress rapidly to ensure growth. The materials are self-teaching and permission is granted on all relevant pages to make unlimited copies for personal use so practice can make perfect.

Technical

The books that have been published by Insight Technical Education were developed to aid the Peterman children and it is our desire that you and your family will benefit from the use of all of the products that we sell.

Detail

## Benefits:

- ✓ Self-Teaching
- ✓ Self-Paced
- ✓ Self-Confidence builder
- ✓ Life skills development
- ✓ Quick successes
- ✓ Great for all learning Styles

## Subjects offered:

- ✓ Accounting
- ✓ Drafting
- ✓ Drafting concepts
- ✓ Build 3D models
- ✓ Introduction to CAD
- ✓ Graphic Design
- ✓ Technical Sketching
- ✓ Vision-Dexterity-Focus™

## Grades and ages:

- ✓ Elementary
- ✓ Middle School
- ✓ Junior High
- ✓ High School

Now Available!  
Complete-A-Sketch™ Advanced™



**INSIGHT™**

**TECHNICAL EDUCATION**

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# COMPLETE-A-SKETCH™

## VOLUME 1 - ORTHOGRAPHIC

**Complete-A-Sketch™ Volume 1** teaches by using examples of complete and partial art. Students use the complete picture to guide them in finishing the incomplete picture, much like a complex dot-to-dot. This provides a basis for precision drawings of all types and hones fine motor skills. It also teaches attention to detail and allows the student to work on his or her own. It can be done using freehand sketching and tools (straight edge, circle templates, etc.). The drawings in this book are two-dimensional orthographic views.

**Age / Grade:** 5 and up / elementary

**Format:** 8 1/2 x 11, paperback

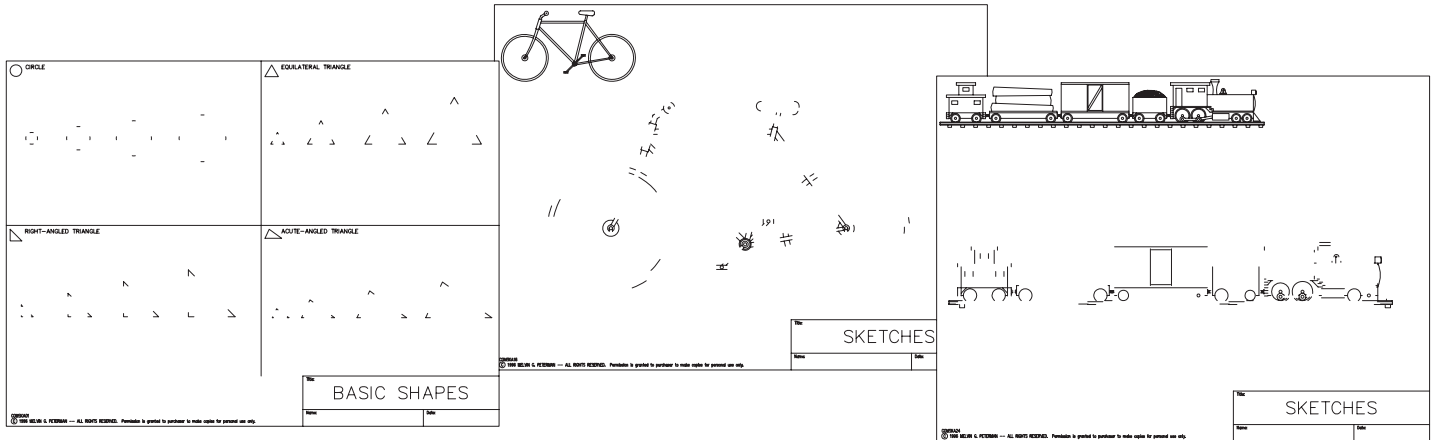
**Binding:** Gummed, with cover that may be used as a folder

**Pages:** 25

**Lessons:** 25

**Item number:** CAS-1

**Price:** US\$10



# COMPLETE-A-SKETCH™

## VOLUME 2 - ISOMETRIC

**Complete-A-Sketch™ Volume 2** uses the same techniques as Volume 1. It can be done using freehand sketching and tools (straight edge, circle templates, etc.). Because the drawings in this book are in three-dimensional isometric views, it is more challenging than Volume 1.

**Age / Grade:** 7 and up / elementary

**Format:** 8 1/2 x 11, paperback

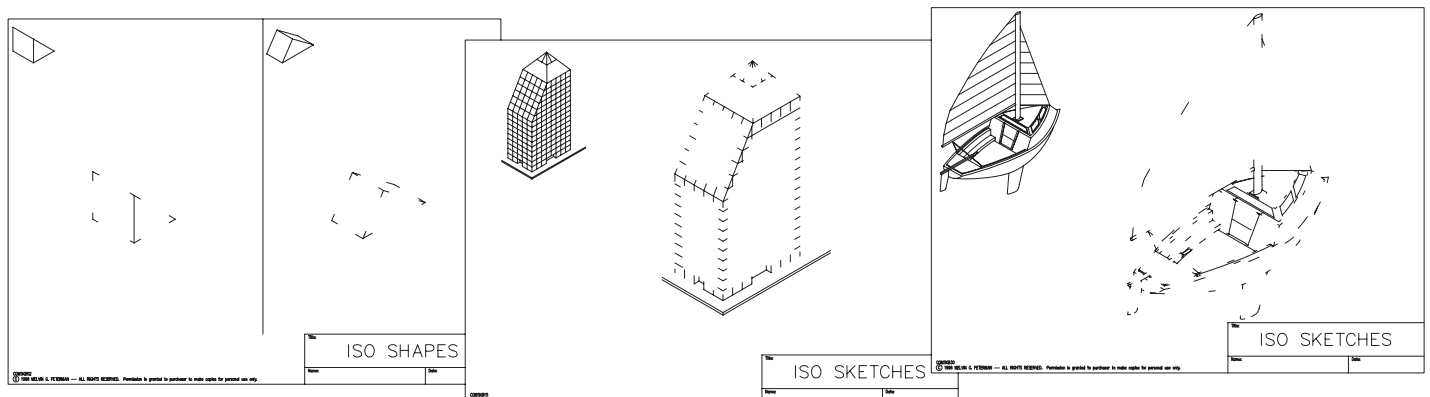
**Binding:** Gummed, with cover that may be used as a folder

**Pages:** 32

**Lessons:** 32

**Item number:** CAS-2

**Price:** US\$10



# COMPLETE-A-SKETCH™

## VOLUME 3 - PERSPECTIVE

**Complete-A-Sketch™ Volume 3** again uses the same techniques as Volume 1 and 2. It can also be done using freehand sketching and tools (straight edge, circle templates, etc.). The drawings in this book are in three-dimensional perspective, which is the most challenging of the series.

**Age / Grade:** 9 and up / elementary

**Format:** 8 1/2 x 11, paperback

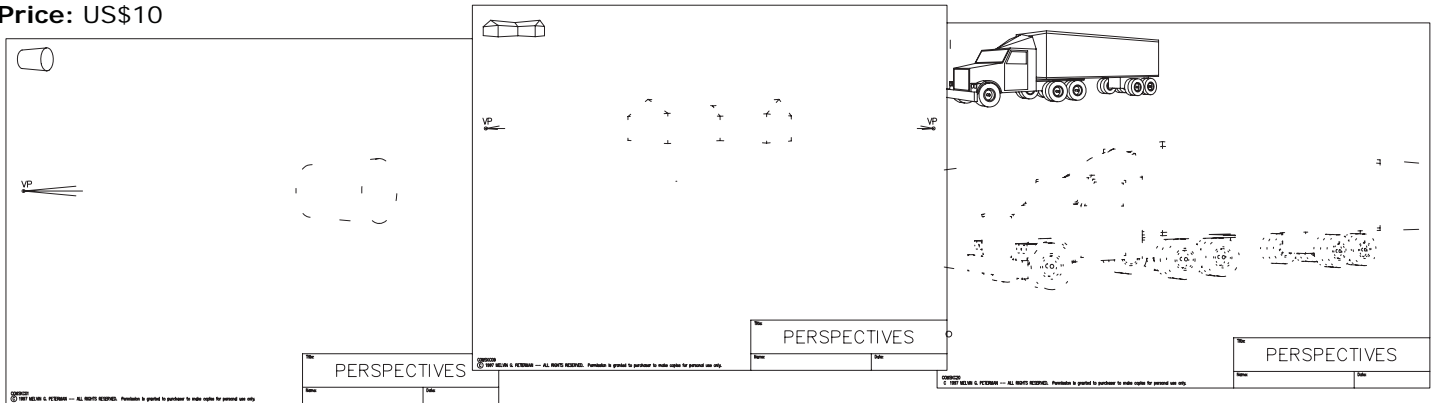
**Binding:** Gummed, with cover that may be used as a folder

**Pages:** 21

**Lessons:** 21

**Item number:** CAS-3

**Price:** US\$10



# COMPLETE-A-SKETCH™

## VISION-DEXTERITY-FOCUS™

**Complete-A-Sketch™ Vision-Dexterity-Focus™** uses the same technique as Volumes 1 - 3. It teaches by using examples of complete and partial art. Students use the complete picture to guide them in finishing the incomplete picture, much like a complex dot-to-dot. This provides a basis for precision drawings of all types and hones fine motor skills. It also teaches attention to detail and allows the student to work on his or her own. It can be done using freehand sketching and tools (straight edge, circle templates, etc.). The drawings in this book are in three different formats: two-dimensional orthographic views, three-dimensional isometric, and three-dimensional perspective.

The focus of this volume is to provide a format for learning technical art that is accessible to those with vision and dexterity challenges. This book was produced as a result of input from parents, educators, and vision therapists that have contributed their thoughts on the subject of learners that have vision, dexterity, and focus challenges. There is a professional version available on CD.

**Age / Grade:** 5 and up / all

**Format:** 8 1/2 x 11, paperback

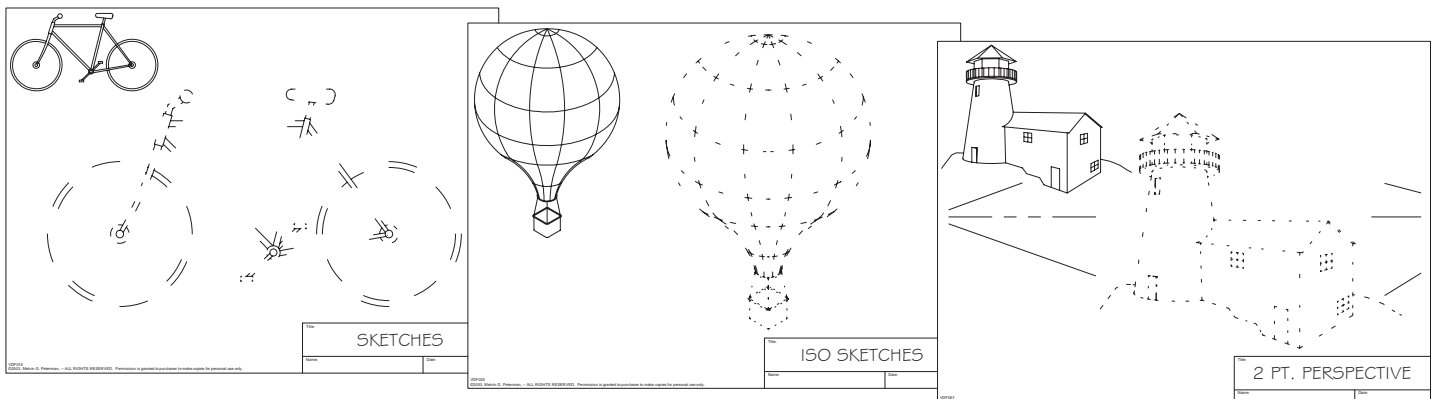
**Binding:** Gummed, with cover that may be used as a folder

**Pages:** 57

**Lessons:** 57

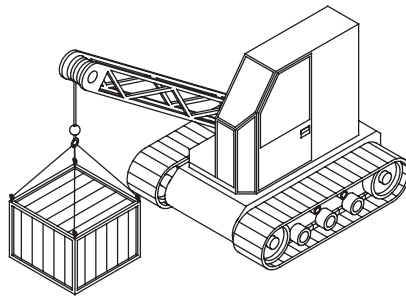
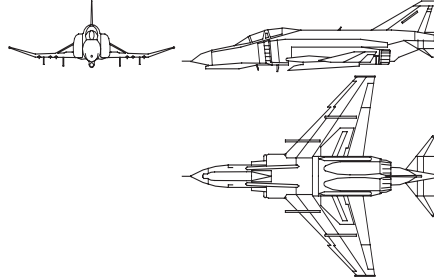
**Item number:** CAS-VDF

**Price:** US\$18



# ADVANCED COMPLETE-A-SKETCH™

**Now Available**  
Check the website for more details



- *TEACHES TECHNICAL SKETCHING*
- *INTRODUCES DRAFTING CONCEPTS*
- *EXPLORES ORTHOGRAPHIC & ISOMETRIC SKETCHING*
- *3D MODELS TO BUILD*
- *PROVIDES INDEPENDENT LEARNING OPPORTUNITY*

## COMPLETE-A-SKETCH™ ADVANCED™

**Complete-A-Sketch™ Advanced™** has been created to introduce advanced sketching with an introduction to drafting concepts, like three views, and flat patterns that are used to make models. Complete-A-Sketch Advanced bridges the gap between the original Complete-A-Sketch™ series and Practical Drafting™. This is not just a continuation, it is a leap forward. It is now easy to print the projects that you want using software you probably already have or can download for free! So now is the time to explore the possibilities that lie ahead.

- **Complete the sketches**
- **Print direct from disk**
- **Print projects direct from PDF**
- **Lots of projects and even more bonus materials**

**Projects:** 45+ bonus projects and materials

**Age / Grade:** 10 and up / Middle School

**Format:** CD / PDF / Other

**Item:** CAS-A

**Price:** US\$28



### **System Requirements:**

- A computer with a CD drive
- Adobe® Acrobat® Reader® 7 or higher installed

### **Note:**

Some Bonus materials require access to the internet for the download of free third party software. Not all third party software is multi-OS or cross-OS capable.

Single user license. Not for use in schools or groups. Contact Insight Technical Education for professional version.



# PRACTICAL GRAPHIC DESIGN™

In this book you will find an introduction to graphic design fundamentals. As a student, you will learn that creativity in the field of graphic design (the ability to continually come up with visually appealing layouts) is not a nebulous, magical thing that people have no control over. You can be a good graphic designer if you learn specific, tried and true techniques and principles much the same way you learn multiplication tables and rules of grammar. This book will show you some of those techniques and principles. Of course, as with any skill, it helps if you have an interest in the subject, also.

Through concise descriptions, entertaining sidebars, and numerous visual samples you will begin to understand the concept that graphic design revolves around type and graphic objects (such as photos, illustrations borders, logos, etc.). You will learn that a set of specific elements of design (design tools) can be used in conjunction with a set of specific principles of design (design rules) to help you work with type and graphic objects. By learning certain techniques and principles you will be able to create a layout that stands out from other layouts on a page or in a magazine and pulls people down a visual path of elements in order of their priority. You will discover how to make what you have to say easier to read and understand. Just like other subjects you learn, practice will increase your skill, so there are design projects at the end of each chapter to get you into a hands-on experience.

Practical Graphic Design guides you through this self-paced, self-taught workbook at least to a point where you will know if you are interested in further pursuit as a possible career option. You will be given the tools required to continue in more depth to the specific areas of interest.

**Age / Grade:** 13 and up / Junior High through High School

**Format:** 8 1/2 x 11, paperback

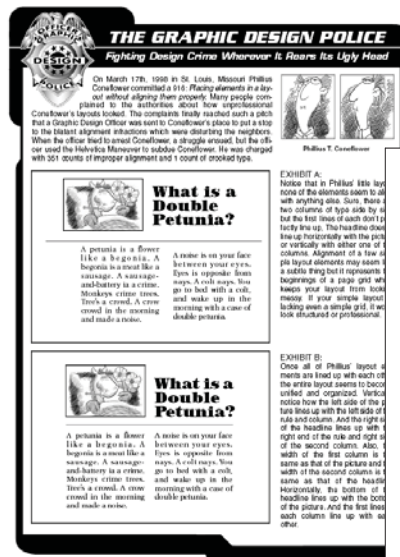
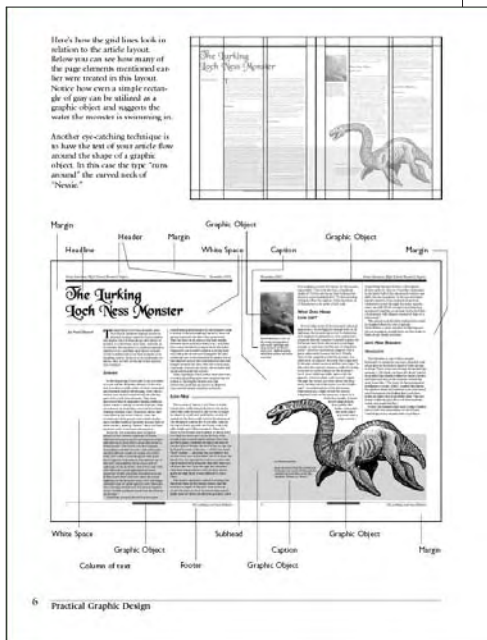
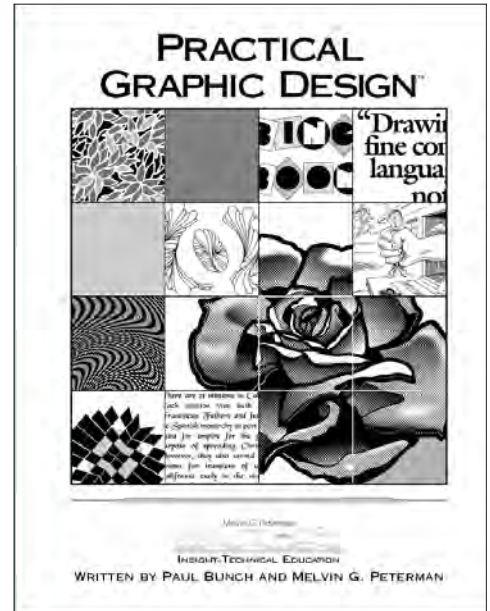
**Binding:** Spiral, lay flat

**Pages:** 153

**Lessons:** 8

**Item number:** PGD

**Price:** US\$38

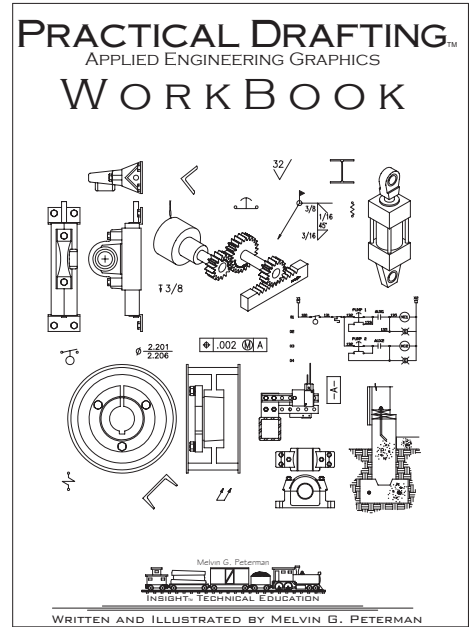


# PRACTICAL DRAFTING™

Practical Drafting was created for students to learn on their own, at their pace, without outside instruction. Practical Drafting starts at the beginning with lines and sketching and quickly builds to a level that goes beyond standard high school drafting courses and even beyond the university level. It exposes the student to many types of drafting and standards.

This book of 136 pages includes over 30 pages of reference materials and focuses on the things that are important in today's engineering world. The goal of this course is to assist the student in mastering some drafting concepts and the art of drafting. Through the use of Practical Drafting, the student learns to read and understand engineering drawings and drawing concepts by reading and doing the work. The book promotes drafting as a stepping stone to other career options such as engineering, architecture, industrial design, etc. It is imperative that all participants, drafters, designers, engineers, machinists, electricians, builders, etc., understand the language of engineering. The study is built with the intent of helping to promote the use of manual and computer drafting skills. All the lessons in this book may be accomplished both by hand and with CAD.

**Age / Grade:** 13 and up / Junior High through High School  
**Format:** 8 1/2 x 11, paperback  
**Binding:** Spiral, lay flat  
**Pages:** 136  
**Lessons:** 101  
**Item number:** PD  
**Price:** US\$38



### LESSON 1.02 LINES & LETTERING

**INSTRUCTIONS:**  
 USING THE CORRECT LINE WEIGHTS, DRAW THE THREE FACES OF THE ABOVE OBJECT FREE HAND ON THE GRID BELOW. INSURE THAT THE THREE VIEWS ARE ALIGNED AND IN THE SAME RELATIVE LOCATION.

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### LESSON 3.00 GEOMETRIC SHAPES & CONSTRUCTIONS

**SPECIAL NOTE:** WHEN NO DIMENSIONS ARE SPECIFIED IN THIS SECTION, MAKE UP YOUR OWN.

**NOTE:**  
 GEOMETRY IS THE BASIS OF ALL ENGINEERING DRAWINGS, DEMONSTRATED BY THE DRAWINGS BELOW.

**INSTRUCTIONS:**  
 FREE HAND DRAW & LETTER THE ITEMS FROM ABOVE. USING A LEAVING-LIGHT GUIDELINES FOR LETTERING IS ACCEPTABLE. REFER TO LESSON 1.04 FOR LETTERING INFORMATION.

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### LESSON 4.08 SKETCHING -- MULTIVIEW

**NOTE:**  
 THE 3 NORMAL VIEWS OF ANY OBJECT ARE THE FRONT, TOP, & RIGHT SIDE. IF THE LEFT VIEW SHOWS A FEATURE MORE CLEARLY, THEN SHOW IT. IF YOU NEED THE 2 NORMAL VIEWS OF ANY OBJECT TO CLARIFY IT, THEN SHOW THEM ALL. THIS IS AN OVERVIEW OF THE 6 NORMAL VIEWS OF ANY OBJECT.

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### LESSON 12.06 SHEET METAL & PLANAR DEVELOPMENTS

**INSTRUCTIONS:**  
 REPRODUCE THE FLAT PATTERN ITEM, CUT IT OUT, & ASSEMBLE FOR THE ILLUSTRATION BELOW.

**NOTE:**  
 THE POINTS ARE EQUALLY SPACED AROUND THE CIRCLE THEN PROJECTED DOWN TO THE CONE GAUGE. THE DISTANCE BETWEEN POINTS IS THEN TRANSFERRED TO THE RADIUS OF THE FLAT PATTERN. THE SAME NUMBER OF ARC SCISSORS WILL PRODUCE A CONE THAT IS REASONABLY ACCURATE. THE ONLY WAY TO BE MORE ACCURATE IS TO USE MATH & PRECISION MEASURING EQUIPMENT OR A CAD PROGRAM DESIGNED FOR SHEET METAL.

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### LESSON 14.02 PIPING

**INSTRUCTIONS:**  
 REPRODUCE THE DRAWING BELOW TWICE THE SIZE OF THE ILLUSTRATION.

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### LESSON 16.00 ELECTRICAL

**NOTE:**  
 ELECTRICAL SYMBOLS HAVE BEEN DETERMINED BY ANSI. ELECTRICAL CODES & STANDARDS ARE DETERMINED BY THE NEC & THE IEC. REFER TO BOOKS & DOCUMENTS ON ELECTRICAL CIRCUIT DRAFTING & DESIGN. THIS SUBJECT REQUIRES A STUDY OF ITS OWN. RADIO SHACK IS A GOOD SOURCE OF HOBBY & PROFESSIONAL REFERENCE MATERIALS.

**INSTRUCTIONS:**  
 REPRODUCE THE SCHEMATIC BELOW THE SIZE OF THE ILLUSTRATION.

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# MANUAL DRAFTING KIT

For the first time, we are now offering a complete drafting kit. The manual drafting kit includes all of the tools specified in Practical Drafting. The manual drafting kit consists of high quality tools that I selected and will surpass your student's needs. The retail price of all of the equipment is around \$125.

Due to the low price we are offering, these kits are only available directly from us and all sales are final. If the product is damaged in shipping, please contact us right away. We exchange only for items that may arrive damaged.

**Grade:** Junior High to High School

**Item:** PDKIT

**Price:** US\$95



## Manual Drafting Kit Includes:

- Small Drafting Board
- T-Square
- English Scale
- Metric Scale
- Circle Template
- 45/45/90 Triangle
- 30/60/90 Triangle
- Bow Compass/Divider
- .3mm Mechanical Pencil
- .5mm Mechanical Pencil
- .7mm Mechanical Pencil
- .9mm Mechanical Pencil
- Eraser - White
- Erasing Shield
- Drafting Dots
- Isometric Ellipse Template

# CAD SOFTWARE

## TurboCAD® Student Edition by IMSI®:

TurboCAD® is a great starting point for learning to use CAD programs. Being able to do both 2D & 3D drawings as well as true 3D solids modeling, it gives the student a good foundation for going on to use other CAD programs. We recommend TurboCAD® for beginning students because of its ease of use, easy to follow and understand student guides, and documentation. TurboCAD® uses a graphical interface that is clear and simple to use.

- > AutoCAD® file compatible
- > Student Edition in this case simply means that it is one revision behind the commercial version. There are no built-in limitations or watermarks.
- > Provided with two books that teach TurboCAD
  - Module 1 teaches 2D TurboCAD with interactive lessons on CD
  - Module 2 teaches 3D TurboCAD with interactive lessons on CD

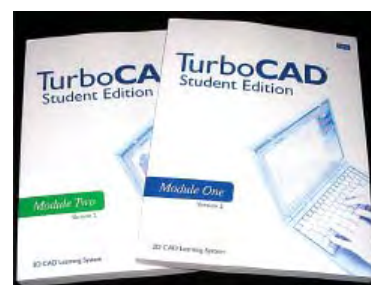
**Format:** CD & paperback

**Item number:** TCAD

**Price:** US\$150

## System Requirements:

- Pentium II class processor
- 128 MB RAM
- 55 to 220 MB of free hard disk space depending on accessory applications installed
- 64+ MB of swap space
- Super VGA (1024x768) display
- High Color (16bit) graphics card
- 4X CD-ROM drive
- Windows 98/ME/NT 4.0/2000/XP



# ***Combination Deals***

## **Practical Drafting & Manual Drafting Kit**

**Item:** PDKITBK

**Price:** US\$125 + Shipping

## **Practical Drafting & TurboCAD**

**Item:** PDCAD

**Price:** US\$180 + Shipping

## **Practical Drafting, Manual Drafting Kit & TurboCAD**

**Item:** PDKITBKCAD

**Price:** US\$270+ Shipping



# Order Form



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ALL standard shipping is via UPS or USPS. For overnight and rush rates - call. For rates to AK, HI, and international destinations - call.



Ways to place an order:

MAIL:

Send order form with check, money order, VISA or MasterCard information (in \$US only) to:  
Insight Technical Education, 13410 NE 92 Street, Vancouver, WA 98682

CALL or email:

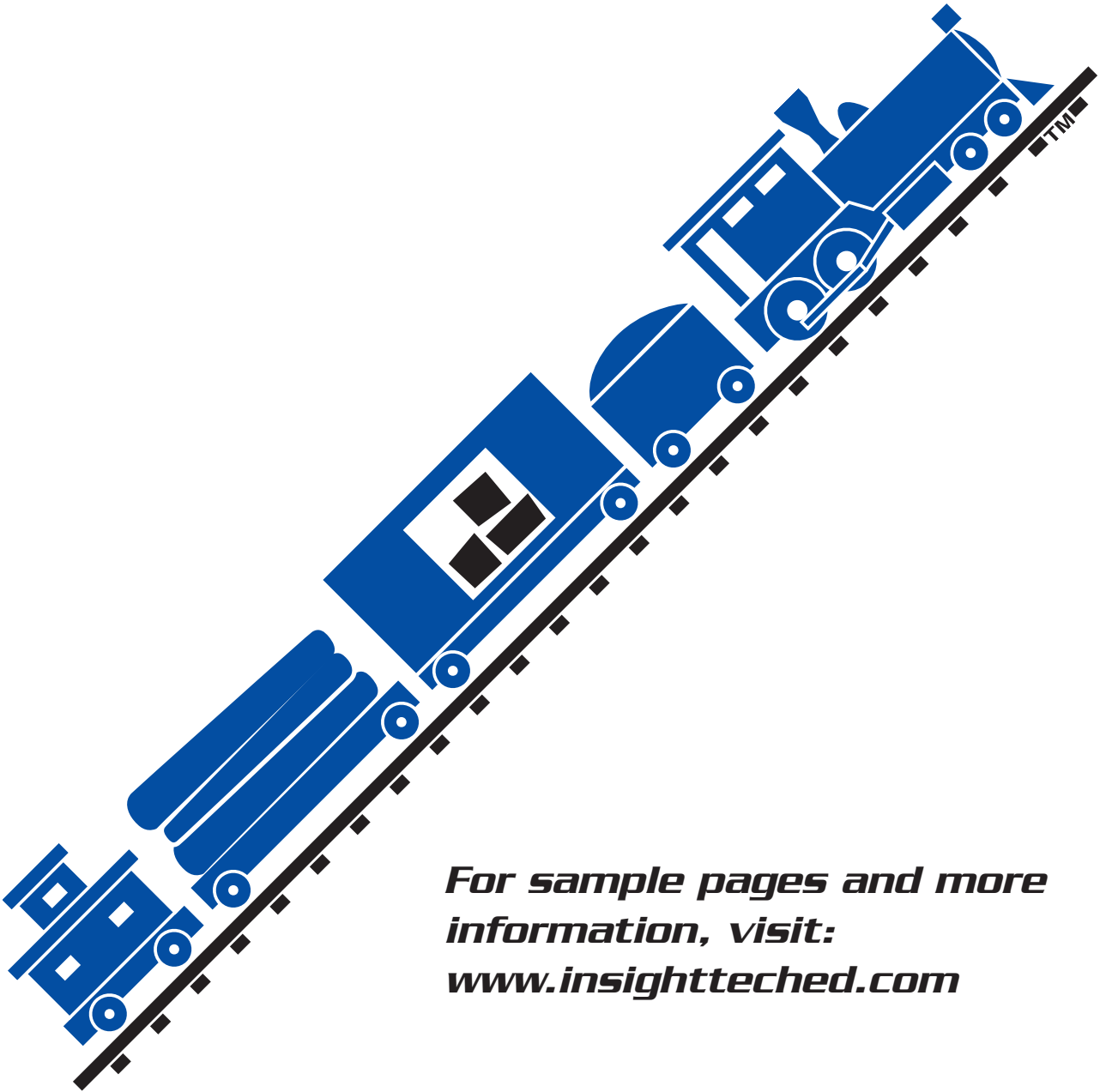
Call 877-640-2256 or scan and email to the email address shown at [www.insightteched.com/contact.htm](http://www.insightteched.com/contact.htm)

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			Subtotal
Washington residents add sales tax			8.2%
			<b>Total</b>



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