

SERVICE MANUAL SECTION

BODY CONTROLLER DIAGNOSTIC TROUBLE CODES

**Model: 3200, 4100, 4300, 4400, 7300, 7400, 7500, 7600, 7700, 8500, 8600,
BE 200, CE Bus, CXT, DuraStar, LoneStar, MXT, ProStar, RXT, TranStar,
WorkStar**

S08327

10/22/2009

Oem Troubleshooting And Repair Manual International Trucks

Minjie Lin



Oem Troubleshooting And Repair Manual International Trucks:

Right here, we have countless books **Oem Troubleshooting And Repair Manual International Trucks** and collections to check out. We additionally have enough money variant types and also type of the books to browse. The normal book, fiction, history, novel, scientific research, as capably as various additional sorts of books are readily manageable here.

As this Oem Troubleshooting And Repair Manual International Trucks, it ends taking place monster one of the favored book Oem Troubleshooting And Repair Manual International Trucks collections that we have. This is why you remain in the best website to see the incredible ebook to have.

https://crm.avenza.com/results/detail/index.jsp/private_bece_2015_questions.pdf

Table of Contents Oem Troubleshooting And Repair Manual International Trucks

1. Understanding the eBook Oem Troubleshooting And Repair Manual International Trucks
 - The Rise of Digital Reading Oem Troubleshooting And Repair Manual International Trucks
 - Advantages of eBooks Over Traditional Books
2. Identifying Oem Troubleshooting And Repair Manual International Trucks
 - Exploring Different Genres
 - Considering Fiction vs. Non-Fiction
 - Determining Your Reading Goals
3. Choosing the Right eBook Platform
 - Popular eBook Platforms
 - Features to Look for in an Oem Troubleshooting And Repair Manual International Trucks
 - User-Friendly Interface
4. Exploring eBook Recommendations from Oem Troubleshooting And Repair Manual International Trucks
 - Personalized Recommendations
 - Oem Troubleshooting And Repair Manual International Trucks User Reviews and Ratings
 - Oem Troubleshooting And Repair Manual International Trucks and Bestseller Lists
5. Accessing Oem Troubleshooting And Repair Manual International Trucks Free and Paid eBooks

- Oem Troubleshooting And Repair Manual International Trucks Public Domain eBooks
 - Oem Troubleshooting And Repair Manual International Trucks eBook Subscription Services
 - Oem Troubleshooting And Repair Manual International Trucks Budget-Friendly Options
6. Navigating Oem Troubleshooting And Repair Manual International Trucks eBook Formats
 - ePub, PDF, MOBI, and More
 - Oem Troubleshooting And Repair Manual International Trucks Compatibility with Devices
 - Oem Troubleshooting And Repair Manual International Trucks Enhanced eBook Features
 7. Enhancing Your Reading Experience
 - Adjustable Fonts and Text Sizes of Oem Troubleshooting And Repair Manual International Trucks
 - Highlighting and Note-Taking Oem Troubleshooting And Repair Manual International Trucks
 - Interactive Elements Oem Troubleshooting And Repair Manual International Trucks
 8. Staying Engaged with Oem Troubleshooting And Repair Manual International Trucks
 - Joining Online Reading Communities
 - Participating in Virtual Book Clubs
 - Following Authors and Publishers Oem Troubleshooting And Repair Manual International Trucks
 9. Balancing eBooks and Physical Books Oem Troubleshooting And Repair Manual International Trucks
 - Benefits of a Digital Library
 - Creating a Diverse Reading Collection Oem Troubleshooting And Repair Manual International Trucks
 10. Overcoming Reading Challenges
 - Dealing with Digital Eye Strain
 - Minimizing Distractions
 - Managing Screen Time
 11. Cultivating a Reading Routine Oem Troubleshooting And Repair Manual International Trucks
 - Setting Reading Goals Oem Troubleshooting And Repair Manual International Trucks
 - Carving Out Dedicated Reading Time
 12. Sourcing Reliable Information of Oem Troubleshooting And Repair Manual International Trucks
 - Fact-Checking eBook Content of Oem Troubleshooting And Repair Manual International Trucks
 - Distinguishing Credible Sources
 13. Promoting Lifelong Learning
 - Utilizing eBooks for Skill Development

- Exploring Educational eBooks
- 14. Embracing eBook Trends
 - Integration of Multimedia Elements
 - Interactive and Gamified eBooks

Oem Troubleshooting And Repair Manual International Trucks Introduction

In this digital age, the convenience of accessing information at our fingertips has become a necessity. Whether its research papers, eBooks, or user manuals, PDF files have become the preferred format for sharing and reading documents. However, the cost associated with purchasing PDF files can sometimes be a barrier for many individuals and organizations. Thankfully, there are numerous websites and platforms that allow users to download free PDF files legally. In this article, we will explore some of the best platforms to download free PDFs. One of the most popular platforms to download free PDF files is Project Gutenberg. This online library offers over 60,000 free eBooks that are in the public domain. From classic literature to historical documents, Project Gutenberg provides a wide range of PDF files that can be downloaded and enjoyed on various devices. The website is user-friendly and allows users to search for specific titles or browse through different categories. Another reliable platform for downloading Oem Troubleshooting And Repair Manual International Trucks free PDF files is Open Library. With its vast collection of over 1 million eBooks, Open Library has something for every reader. The website offers a seamless experience by providing options to borrow or download PDF files. Users simply need to create a free account to access this treasure trove of knowledge. Open Library also allows users to contribute by uploading and sharing their own PDF files, making it a collaborative platform for book enthusiasts. For those interested in academic resources, there are websites dedicated to providing free PDFs of research papers and scientific articles. One such website is Academia.edu, which allows researchers and scholars to share their work with a global audience. Users can download PDF files of research papers, theses, and dissertations covering a wide range of subjects. Academia.edu also provides a platform for discussions and networking within the academic community. When it comes to downloading Oem Troubleshooting And Repair Manual International Trucks free PDF files of magazines, brochures, and catalogs, Issuu is a popular choice. This digital publishing platform hosts a vast collection of publications from around the world. Users can search for specific titles or explore various categories and genres. Issuu offers a seamless reading experience with its user-friendly interface and allows users to download PDF files for offline reading. Apart from dedicated platforms, search engines also play a crucial role in finding free PDF files. Google, for instance, has an advanced search feature that allows users to filter results by file type. By specifying the file type as "PDF," users can find websites that offer free PDF downloads on a specific topic. While downloading Oem Troubleshooting And Repair Manual International Trucks free PDF files is convenient, its important to note

that copyright laws must be respected. Always ensure that the PDF files you download are legally available for free. Many authors and publishers voluntarily provide free PDF versions of their work, but its essential to be cautious and verify the authenticity of the source before downloading Oem Troubleshooting And Repair Manual International Trucks. In conclusion, the internet offers numerous platforms and websites that allow users to download free PDF files legally. Whether its classic literature, research papers, or magazines, there is something for everyone. The platforms mentioned in this article, such as Project Gutenberg, Open Library, Academia.edu, and Issuu, provide access to a vast collection of PDF files. However, users should always be cautious and verify the legality of the source before downloading Oem Troubleshooting And Repair Manual International Trucks any PDF files. With these platforms, the world of PDF downloads is just a click away.

FAQs About Oem Troubleshooting And Repair Manual International Trucks Books

What is a Oem Troubleshooting And Repair Manual International Trucks PDF? A PDF (Portable Document Format) is a file format developed by Adobe that preserves the layout and formatting of a document, regardless of the software, hardware, or operating system used to view or print it.

How do I create a Oem Troubleshooting And Repair Manual International Trucks PDF? There are several ways to create a PDF: Use software like Adobe Acrobat, Microsoft Word, or Google Docs, which often have built-in PDF creation tools. Print to PDF: Many applications and operating systems have a "Print to PDF" option that allows you to save a document as a PDF file instead of printing it on paper. Online converters: There are various online tools that can convert different file types to PDF.

How do I edit a Oem Troubleshooting And Repair Manual International Trucks PDF? Editing a PDF can be done with software like Adobe Acrobat, which allows direct editing of text, images, and other elements within the PDF. Some free tools, like PDFescape or Smallpdf, also offer basic editing capabilities.

How do I convert a Oem Troubleshooting And Repair Manual International Trucks PDF to another file format? There are multiple ways to convert a PDF to another format: Use online converters like Smallpdf, Zamzar, or Adobe Acrobats export feature to convert PDFs to formats like Word, Excel, JPEG, etc. Software like Adobe Acrobat, Microsoft Word, or other PDF editors may have options to export or save PDFs in different formats.

How do I password-protect a Oem Troubleshooting And Repair Manual International Trucks PDF? Most PDF editing software allows you to add password protection. In Adobe Acrobat, for instance, you can go to "File" -> "Properties" -> "Security" to set a password to restrict access or editing capabilities.

Are there any free alternatives to Adobe Acrobat for working with PDFs? Yes, there are many free alternatives for working with PDFs, such as: LibreOffice: Offers PDF editing features. PDFsam: Allows splitting, merging, and editing PDFs. Foxit Reader: Provides basic PDF viewing and editing capabilities.

How do I compress a PDF file? You can use online tools like Smallpdf, ILovePDF, or desktop software like Adobe Acrobat to

compress PDF files without significant quality loss. Compression reduces the file size, making it easier to share and download. Can I fill out forms in a PDF file? Yes, most PDF viewers/editors like Adobe Acrobat, Preview (on Mac), or various online tools allow you to fill out forms in PDF files by selecting text fields and entering information. Are there any restrictions when working with PDFs? Some PDFs might have restrictions set by their creator, such as password protection, editing restrictions, or print restrictions. Breaking these restrictions might require specific software or tools, which may or may not be legal depending on the circumstances and local laws.

Find Oem Troubleshooting And Repair Manual International Trucks :

private bece 2015 questions

probation officer trainee study guide

probability and statistical inference solution manual 8th

proceedings of the 21st international meshing roundtable

program instructions for rca universal remote

process of meisis concept map

private clubs in america and around the world english edition

printable servsafe study guides tricia joy

probability and statistics for computer scientists

pro power compact home gym manual

pritable weddingplanning registration form contact information

pro 404 scanner manual

procegraves ou creacuteation une introduction agrave la penseacutee lettreacutee chinoise

printable writing paper

problem solving theory unit 5 quiz 1

Oem Troubleshooting And Repair Manual International Trucks :

principles of physical chemistry raff lionel m abebooks - Jan 12 2023

professor raff is the author of 165 scientific papers and three book chapters primarily in the area of theoretical studies of reaction dynamics in addition to the text and instructor s guide for principles of physical chemistry dr raff was elected to outstanding educators in

principles of physical chemistry semantic scholar - Jun 17 2023

1998 1 introduction 2 typical ligands 3 nomenclature geometrical structure and isomerism of coordination compounds 4 preparation of coordination compounds 5 stability of coordination compounds 6 expand 129 semantic scholar extracted view of principles of physical chemistry by l raff

principles of physical chemistry by lionel m raff nasa ads - Apr 03 2022

principles of physical chemistry by lionel m raff mccann michael p publication journal of chemical education pub date october 2001 doi 10 1021 ed078p1337

principles of physical chemistry raff lionel m amazon com tr - Jul 18 2023

arama yapmak istediğiniz kategoriye seçin

principles of physical chemistry raff lionel m 9780130278050 - Aug 19 2023

jan 1 2001 the text presents all the theories and equations relevant to classical thermodynamics quantum mechanics and bonding spectroscopy statistical mechanics kinetics and dynamics for individuals interested in mastering the basic principles and methods of physical chemistry including chemical engineers

principles of physical chemistry lionel raff pearson - Mar 14 2023

professor raff is the author of 165 scientific papers and three book chapters primarily in the area of theoretical studies of reaction dynamics in addition to the text and instructor s guide for principles of physical chemistry dr raff was elected to outstanding educators in

principles of physical chemistry raff lionel m researchgate - Oct 09 2022

oct 1 2001 download citation principles of physical chemistry raff lionel m physical chemistry text keywords audience upper division undergraduate find read and cite all the research you

principles of physical chemistry raff lionel m 9780130278050 - Jul 06 2022

jan 1 2001 buy principles of physical chemistry on amazon com free shipping on qualified orders

principles of physical chemistry by lionel m raff open library - Nov 10 2022

imported from amazon com record principles of physical chemistry by lionel m raff march 2000 prentice hall edition hardcover in english

principles of physical chemistry raff lionel m abebooks - Aug 07 2022

this lucidly written text with 1500 exercises problems and examples is designed to bring students to a functional level of literacy in the use practice appreciation and execution of physical chemistry principles and methods the text presents all the theories and equations necessary and teaches students how to think how to use principles

principles of physical chemistry by lionel m raff goodreads - Apr 15 2023

jan 26 2001 principles of physical chemistry lionel m raff 4 00 9 ratings2 reviews this easy to read volume designed to bring users to a functional level of literacy in the use practice appreciation and execution of physical chemistry principles and methods is designed to promote understanding

principles of physical chemistry 2nd edition wiley - Feb 13 2023

description principles of physical chemistry second edition uniquely uses simple physical models as well as rigorous treatments for understanding molecular and supramolecular systems and processes

principles of physical chemistry raff lionel m amazon ca - Dec 11 2022

jan 16 2001 this easy to read volume designed to bring users to a functional level of literacy in the use practice appreciation and execution of physical chemistry principles and methods is designed to promote understanding

principles of physical chemistry paperback 16 january 2001 - Sep 08 2022

jan 16 2001 amazon in buy principles of physical chemistry book online at best prices in india on amazon in read principles of physical chemistry book reviews author details and more at amazon in free delivery on qualified orders

amazon com customer reviews principles of physical chemistry - Feb 01 2022

find helpful customer reviews and review ratings for principles of physical chemistry at amazon com read honest and unbiased product reviews from our users amazon com customer reviews principles of physical chemistry

principles of physical chemistry lionel m raff google books - May 16 2023

principles of physical chemistry lionel m raff prentice hall 2001 chemistry physical and theoretical 512 pages

biblio principles of physical chemistry part 1 2 by lionel m raff - May 04 2022

jan 16 2001 find the best prices on principles of physical chemistry part 1 2 by lionel m raff at biblio paperback 2001 prentice hall 9780130278050

principles of physical chemistry by lionel m raff goodreads - Jun 05 2022

jan 1 2000 read reviews from the world s largest community for readers paperback printed in the usa contains all of chapters 1 20 i e both parts a and b materia

principles of physical chemistry lionel m raff google books - Sep 20 2023

principles of physical chemistry part 1 principles of physical chemistry lionel m raff author lionel m raff edition illustrated publisher prentice hall 2001 isbn

student solutions manual raff lionel m 9780130406644 - Mar 02 2022

mar 18 2001 professor raff is the author of 165 scientific papers and three book chapters primarily in the area of theoretical studies of reaction dynamics in addition to the text and instructor s guide for principles of physical chemistry dr raff was elected to outstanding educators in america in 1975

entwined in you sylvia day pdf free download - Oct 04 2022

web jan 20 2023 here you can download entwined with you crossfire shared files entwined with you a crossfire novel by sylvia day rar from 4shared com 2 3 mb crossfire 3

entwined with you sylvia day pdf free download 2shared bing - Aug 02 2022

web entwined with you sylvia day pdf free download 2shared bing pdf introduction entwined with you sylvia day pdf free download 2shared bing pdf copy grounded

entwined with you sylvia day pdf free download 2shared bing - May 31 2022

web you could speedily download this entwined with you sylvia day pdf free download 2shared bing after getting deal so in imitation of you require the book swiftly you can

entwined with you read online free by sylvia day novel12 - Jul 13 2023

web entwined with you author sylvia day genres romance young adult series crossfire 3 views 130284 list chapter read free list chapter or page 1 page 1 2 page 2 3

entwined with you sylvia day pdf free download 2shared bing - Feb 25 2022

web it is your agreed own become old to comport yourself reviewing habit among guides you could enjoy now is entwined with you sylvia day pdf free download 2shared bing

entwined with you by sylvia day audiobook scribd - Jan 07 2023

web sylvia day is the 1 new york times and 1 international bestselling author of over 20 award winning novels sold in more than 40 countries she is a 1 bestselling author in 23

entwined with you by sylvia day books on google play - Nov 05 2022

web entwined with you ebook written by sylvia day read this book using google play books app on your pc android ios devices download for offline reading highlight

read free entwined with you sylvia day free 2shared bing pdf - Jul 01 2022

web jul 25 2023 getting this info get the entwined with you sylvia day free 2shared bing connect that we pay for here and check out the link you could buy lead entwined with

entwined with you sylvia day google books - Feb 08 2023

web jun 4 2013 entwined with you sylvia day penguin jun 4 2013 fiction 368 pages the worldwide phenomenon continues as eva and gideon face the demons of their

entwined with you sylvia day pdf free 2shared bing kristen - Mar 09 2023

web entwined with you sylvia day pdf free 2shared bing is available in our book collection an online access to it is set as public so you can download it instantly our digital library

[entwined with you sylvia day pdf free download 2shared bing](#) - Jan 27 2022

web mar 24 2023 entwined with you sylvia day pdf free download 2shared bing 1 11 downloaded from uniport edu ng on march 24 2023 by guest entwined with you

entwined with you sylvia day pdf free download 2shared - Oct 24 2021

web file type pdf entwined with you sylvia day free 2shared entwined with you sylvia day free 2shared as recognized adventure as capably as experience just about

[read free entwined with you sylvia day free 2shared bing pdf](#) - Dec 26 2021

web jul 30 2023 with you sylvia day free 2shared bing partner that we provide here and check out the link you could purchase guide entwined with you sylvia day free

entwined with you sylvia day pdf free download 2shared bing - Apr 10 2023

web sylvia day crossfire series four book collection bared to you the crossfire series box set so close on fire with an afterword by the playwright one with you misled kiss of

entwined with you crossfire 3 sylvia d pdf download 2shared - Jun 12 2023

web jul 10 2013 entwined with you crossfire 3 sylvia day pdf download at 2shared click on document entwined with you crossfire 3 sylvia day pdf to start

entwined with you sylvia day free download 2shared bing pdf - Mar 29 2022

web downloadsylvia day pdf free download 2shared pdf jan 19th 2021 5 85mb entwined with you sylvia day pdf free download so to help you locate

[entwined with you a crossfire novel crossfire book 3](#) - May 11 2023

web entwined with you a crossfire novel crossfire book 3 read online free without download pdf epub fb2 ebooks by sylvia day

[entwined with you by sylvia day 9780425263921 penguin](#) - Dec 06 2022

web we made our own rules and surrendered completely to the exquisite power of possession the worldwide phenomenon continues as eva and gideon face the demons of their

entwined with you sylvia day pdf free download 2shared bing - Apr 29 2022

web jun 17 2023 we extend the associate to buy and create bargains to fetch and set up entwined with you sylvia day pdf free download 2shared bing therefore

read free entwined with you sylvia day free 2shared bing pdf - Sep 03 2022

web jul 25 2023 get the entwined with you sylvia day free 2shared bing member that we allow here and check out the link you could buy lead entwined with you sylvia day

entwined with you day sylvia amazon ca books - Nov 24 2021

web praise for sylvia day and the crossfire series you know you re in for a good book when other authors and i mean lots of other authors recommend it usa today a

pdf epub entwined with you crossfire 3 download - Aug 14 2023

web oct 16 2022 download book entwined with you crossfire 3 by author sylvia day in pdf epub original title isbn published on 2013 6 4 in edition language

bearing word problems brilliant math science wiki - Jun 18 2022

web oct 31 2023 most bearing word problems involving trigonometry and angles can be reduced to finding relationships between angles and the measurements of the sides of a triangle in this case finding the right basic trigonometric functions to relate the angles and measurements are crucial for setting up and solving the problem correctly

bearings 3 3 1 cie igcse maths extended revision notes 2023 - Mar 28 2023

web bearings questions will normally involve the use of pythagoras or trigonometry to find missing distances lengths and directions angles within navigation questions you should always draw a diagram

bearing trigonometry varsity tutors - Aug 21 2022

web possible answers correct answer explanation the bearing of a point b from a point a in a horizontal plane is defined as the acute angle made by the ray drawn from a through b with the north south line through a the bearing is read from the north or south line toward the east or west

drfrostmaths com - Mar 16 2022

web gcse bearings ks3 4 shape space measures angles covers measuring bearings constructing bearings map scale and bearings using angle laws excludes cosine rule trigonometry questions download all files zip gcse bearings pptx slides gcse bearings pdf worksheet gcse bearings docx worksheet

gcse maths revision bearings by trigonometry tes - Sep 21 2022

web jan 21 2021 a gcse maths worksheet covering trigonometry type bearing questions suitable for gcse students sitting the 9 1 a level maths students revision and some key stage 3 students suitable for all the big examination boards

bearings trigonometry rp igcse mathematics - May 30 2023

web let s consider a bearings problem about the journey of a ship a ship sails 22km on a bearing of zero four two degrees from point a and a further 30km on a bearing of zero nine zero degrees to arrive at point b what is the bearing of b from a the first thing you need to do with any problem like this is to draw a diagram

trigonometry and bearings csec math tutor - Sep 02 2023

web the cosine rule watch on bearings part 1 the fundamentals bearings part 1 watch on bearings part 2 bearings part 2

watch on three dimensional trigonometry watch on use trigonometric ratios to calculate angles and distances

trigonometry bearings go teach maths handcrafted - Feb 12 2022

web calculating bearings choosing a trigonometric ratio to use calculating angles lengths using trigonometry angles of elevation depression solving real life problems using trigonometry 3d trigonometry problems ready to use mathematics resources for key stage 3 key stage 4 and gcse maths classes

mark scheme for 1ma1 higher themed papers trigonometry 2d and bearings - Aug 01 2023

web part working or answer an examiner might expect to see mark notes ab sin 38 16 ab 0 61566 16 m1 this mark is given for a method to find the length of ab 9 85 a1 this mark is given for the correct answer only question 2 total 2 marks part working or answer an examiner might expect to see mark notes 3 75 2 5 5 12 5 2 5 4 10

bearings maths advanced year 11 nsw class mathematics - Apr 16 2022

web curriculum based maths in nsw year 11 maths advanced find topic revision quizzes diagnostic quizzes extended response questions past papers videos and worked solutions for bearings

how to solve these basic trigonometry questions bearings - Jul 20 2022

web feb 17 2017 question 5 in the above figure o is the starting point a and b are the positions of two runners after 30 min or 0 5hour running 10km h towards north and 12km h towards east respectively so oa 10xx0 5 5km and ob 12xx0 5 6km by pythagorean theorem the distance of runner b from a ab

using bearings in trigonometry worked example bbc - Feb 24 2023

web using bearings in trigonometry worked example bearings are angles used in navigation they are based on moving clockwise from due north missing information about bearings can be worked

bearings practice questions corbettmaths - Oct 23 2022

web april 4 2018 corbettmaths bearings practice questions click here for questions click here for answers practice questions previous area of a triangle sine practice questions next changing the subject practice questions the corbettmaths practice questions on bearings

bearings igcse trigonometrics bearings question paper 1 - Oct 03 2023

web answer a angle atc 2 b t is due north of c calculate the bearing of b from c for more awesome gcse and a level resources visit us at savemyexams co the scale drawing shows the positions of two towns a and c on a map on the map 1 centimetre represents 20 kilometres

using bearings in trigonometry bearings bbc - Dec 25 2022

web national 5 using bearings in trigonometry bearings bearings are angles used in navigation they are based on moving clockwise from due north missing information about bearings can be

bearings mathematics gcse revision - Apr 28 2023

web the bearing of a from b is 045° the bearing of c from a is 135° if ab 8km and ac 6km what is the bearing of b from c tan c 8 6 so c 53 13° y 180° 135° 45° interior angles x 360° 53 13° 45° angles round a point 262° to the nearest whole number this video shows you how to work out bearings questions

bearings gcse maths steps examples worksheet third - Jun 30 2023

web locate the points you are calculating the bearing from and to using the north lines for reference at both points use angle rules and or trigonometry to calculate any angles that are required read off the three figure bearing required

trigonometric questions with bearings online math help and - May 18 2022

web example a ship sails from a point a on a bearing of 040 for 3km to a point b at b the ship alters course and sails for 5km on a bearing of 160 to a point c find the distance ac and the bearing of a from c cosine rule and bearing problem example

jack walks from town a for 10 miles on a bearing of 20

bearings with trigonometry sohcahtoa teaching resources - Nov 23 2022

web may 30 2019 we are learning about bearings with trigonometry we are learning to use trigonometry in questions involving bearings differentiated objectives developing learners will be able to calculate the size of a bearing using trigonometry secure learners will be able to find missing lengths in bearings problems using trigonometry

bearings edexcel igcse maths revision notes 2022 - Jan 26 2023

web what are bearings used for bearings questions will normally involve the use of pythagoras or trigonometry to find missing distances lengths and directions angles within navigation questions you should always draw a diagram there may be a scale given or you may need to consider using a scale