

Instructor's Solutions Manual

Operations Management

12th Edition

Principles of Operations Management

10th Edition

Jay Heizer

Texas Lutheran University

Barry Render

Rollins College

Chuck Munson

Washington State University

PEARSON

Boston Columbus Indianapolis New York San Francisco
Amsterdam Cape Town Dubai London Madrid Milan Munich Paris Montréal Toronto
Delhi Mexico City São Paulo Sydney Hong Kong Seoul Singapore Taipei Tokyo

Copyright ©2017 Pearson Education, Inc.

Operations Management Instructor Solutions Manual Heizer

Rachel Sandford



Operations Management Instructor Solutions Manual Heizer:

Immerse yourself in heartwarming tales of love and emotion with Explore Love with is touching creation, Experience Loveis Journey in **Operations Management Instructor Solutions Manual Heizer** . This emotionally charged ebook, available for download in a PDF format (*), is a celebration of love in all its forms. Download now and let the warmth of these stories envelop your heart.

<https://crm.avenza.com/About/scholarship/Documents/Raising%20Kingdom%20Kids%20Devotional.pdf>

Table of Contents Operations Management Instructor Solutions Manual Heizer

1. Understanding the eBook Operations Management Instructor Solutions Manual Heizer
 - The Rise of Digital Reading Operations Management Instructor Solutions Manual Heizer
 - Advantages of eBooks Over Traditional Books
2. Identifying Operations Management Instructor Solutions Manual Heizer
 - 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 Operations Management Instructor Solutions Manual Heizer
 - User-Friendly Interface
4. Exploring eBook Recommendations from Operations Management Instructor Solutions Manual Heizer
 - Personalized Recommendations
 - Operations Management Instructor Solutions Manual Heizer User Reviews and Ratings
 - Operations Management Instructor Solutions Manual Heizer and Bestseller Lists
5. Accessing Operations Management Instructor Solutions Manual Heizer Free and Paid eBooks
 - Operations Management Instructor Solutions Manual Heizer Public Domain eBooks
 - Operations Management Instructor Solutions Manual Heizer eBook Subscription Services
 - Operations Management Instructor Solutions Manual Heizer Budget-Friendly Options

6. Navigating Operations Management Instructor Solutions Manual Heizer eBook Formats
 - ePub, PDF, MOBI, and More
 - Operations Management Instructor Solutions Manual Heizer Compatibility with Devices
 - Operations Management Instructor Solutions Manual Heizer Enhanced eBook Features
7. Enhancing Your Reading Experience
 - Adjustable Fonts and Text Sizes of Operations Management Instructor Solutions Manual Heizer
 - Highlighting and Note-Taking Operations Management Instructor Solutions Manual Heizer
 - Interactive Elements Operations Management Instructor Solutions Manual Heizer
8. Staying Engaged with Operations Management Instructor Solutions Manual Heizer
 - Joining Online Reading Communities
 - Participating in Virtual Book Clubs
 - Following Authors and Publishers Operations Management Instructor Solutions Manual Heizer
9. Balancing eBooks and Physical Books Operations Management Instructor Solutions Manual Heizer
 - Benefits of a Digital Library
 - Creating a Diverse Reading Collection Operations Management Instructor Solutions Manual Heizer
10. Overcoming Reading Challenges
 - Dealing with Digital Eye Strain
 - Minimizing Distractions
 - Managing Screen Time
11. Cultivating a Reading Routine Operations Management Instructor Solutions Manual Heizer
 - Setting Reading Goals Operations Management Instructor Solutions Manual Heizer
 - Carving Out Dedicated Reading Time
12. Sourcing Reliable Information of Operations Management Instructor Solutions Manual Heizer
 - Fact-Checking eBook Content of Operations Management Instructor Solutions Manual Heizer
 - 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

Operations Management Instructor Solutions Manual Heizer Introduction

In the digital age, access to information has become easier than ever before. The ability to download Operations Management Instructor Solutions Manual Heizer has revolutionized the way we consume written content. Whether you are a student looking for course material, an avid reader searching for your next favorite book, or a professional seeking research papers, the option to download Operations Management Instructor Solutions Manual Heizer has opened up a world of possibilities. Downloading Operations Management Instructor Solutions Manual Heizer provides numerous advantages over physical copies of books and documents. Firstly, it is incredibly convenient. Gone are the days of carrying around heavy textbooks or bulky folders filled with papers. With the click of a button, you can gain immediate access to valuable resources on any device. This convenience allows for efficient studying, researching, and reading on the go. Moreover, the cost-effective nature of downloading Operations Management Instructor Solutions Manual Heizer has democratized knowledge. Traditional books and academic journals can be expensive, making it difficult for individuals with limited financial resources to access information. By offering free PDF downloads, publishers and authors are enabling a wider audience to benefit from their work. This inclusivity promotes equal opportunities for learning and personal growth. There are numerous websites and platforms where individuals can download Operations Management Instructor Solutions Manual Heizer. These websites range from academic databases offering research papers and journals to online libraries with an expansive collection of books from various genres. Many authors and publishers also upload their work to specific websites, granting readers access to their content without any charge. These platforms not only provide access to existing literature but also serve as an excellent platform for undiscovered authors to share their work with the world. However, it is essential to be cautious while downloading Operations Management Instructor Solutions Manual Heizer. Some websites may offer pirated or illegally obtained copies of copyrighted material. Engaging in such activities not only violates copyright laws but also undermines the efforts of authors, publishers, and researchers. To ensure ethical downloading, it is advisable to utilize reputable websites that prioritize the legal distribution of content. When downloading Operations Management Instructor Solutions Manual Heizer, users should also consider the potential security risks associated with online platforms. Malicious actors may exploit vulnerabilities in unprotected websites to distribute malware or steal personal information. To protect themselves, individuals should ensure their devices have reliable antivirus software installed and validate the legitimacy of the websites they are downloading from. In conclusion, the ability to download Operations Management Instructor Solutions Manual Heizer has transformed the way we access information. With the convenience, cost-effectiveness, and accessibility it offers, free PDF downloads have become a popular choice for students, researchers, and book lovers worldwide. However, it is

crucial to engage in ethical downloading practices and prioritize personal security when utilizing online platforms. By doing so, individuals can make the most of the vast array of free PDF resources available and embark on a journey of continuous learning and intellectual growth.

FAQs About Operations Management Instructor Solutions Manual Heizer Books

How do I know which eBook platform is the best for me? Finding the best eBook platform depends on your reading preferences and device compatibility. Research different platforms, read user reviews, and explore their features before making a choice. Are free eBooks of good quality? Yes, many reputable platforms offer high-quality free eBooks, including classics and public domain works. However, make sure to verify the source to ensure the eBook credibility. Can I read eBooks without an eReader? Absolutely! Most eBook platforms offer webbased readers or mobile apps that allow you to read eBooks on your computer, tablet, or smartphone. How do I avoid digital eye strain while reading eBooks? To prevent digital eye strain, take regular breaks, adjust the font size and background color, and ensure proper lighting while reading eBooks. What the advantage of interactive eBooks? Interactive eBooks incorporate multimedia elements, quizzes, and activities, enhancing the reader engagement and providing a more immersive learning experience. Operations Management Instructor Solutions Manual Heizer is one of the best book in our library for free trial. We provide copy of Operations Management Instructor Solutions Manual Heizer in digital format, so the resources that you find are reliable. There are also many Ebooks of related with Operations Management Instructor Solutions Manual Heizer. Where to download Operations Management Instructor Solutions Manual Heizer online for free? Are you looking for Operations Management Instructor Solutions Manual Heizer PDF? This is definitely going to save you time and cash in something you should think about. If you trying to find then search around for online. Without a doubt there are numerous these available and many of them have the freedom. However without doubt you receive whatever you purchase. An alternate way to get ideas is always to check another Operations Management Instructor Solutions Manual Heizer. This method for see exactly what may be included and adopt these ideas to your book. This site will almost certainly help you save time and effort, money and stress. If you are looking for free books then you really should consider finding to assist you try this. Several of Operations Management Instructor Solutions Manual Heizer are for sale to free while some are payable. If you arent sure if the books you would like to download works with for usage along with your computer, it is possible to download free trials. The free guides make it easy for someone to free access online library for download books to your device. You can get free download on free trial for lots of books categories. Our library is the biggest of these that have literally hundreds of thousands of different products categories represented. You will also see that there are specific sites catered to different product types or categories, brands or niches related with

Operations Management Instructor Solutions Manual Heizer. So depending on what exactly you are searching, you will be able to choose e books to suit your own need. Need to access completely for Campbell Biology Seventh Edition book? Access Ebook without any digging. And by having access to our ebook online or by storing it on your computer, you have convenient answers with Operations Management Instructor Solutions Manual Heizer To get started finding Operations Management Instructor Solutions Manual Heizer, you are right to find our website which has a comprehensive collection of books online. Our library is the biggest of these that have literally hundreds of thousands of different products represented. You will also see that there are specific sites catered to different categories or niches related with Operations Management Instructor Solutions Manual Heizer So depending on what exactly you are searching, you will be able to choose ebook to suit your own need. Thank you for reading Operations Management Instructor Solutions Manual Heizer. Maybe you have knowledge that, people have search numerous times for their favorite readings like this Operations Management Instructor Solutions Manual Heizer, but end up in harmful downloads. Rather than reading a good book with a cup of coffee in the afternoon, instead they juggled with some harmful bugs inside their laptop. Operations Management Instructor Solutions Manual Heizer is available in our book collection an online access to it is set as public so you can download it instantly. Our digital library spans in multiple locations, allowing you to get the most less latency time to download any of our books like this one. Merely said, Operations Management Instructor Solutions Manual Heizer is universally compatible with any devices to read.

Find Operations Management Instructor Solutions Manual Heizer :

raising kingdom kids devotional

ranger rci 2950 2970 user guide

rascal 200t scooter wiring manual

ratus puces savantes jeanine guion

rangoli save earth

randall 702-user manual

ramp phet answers

rav4 manual transmission

range rover model guide

ralette fait judo jeanine guion

rascal mobility scooter wiring diagram

range rover classic 1994 manual

ratna sagar social guide

ramona the extra good sunday

rank tue kabupaten kebumen sd 2015

Operations Management Instructor Solutions Manual Heizer :

anglo american platinum cadet process learnerships 2023 - Jul 03 2022

web aug 30 2023 anglo american platinum is recruiting and invites suitably qualified candidates to apply for the cadet process learnerships 2023

anglo american learnership 2023 2024 24 7 careers - Aug 16 2023

web aug 3 2023 company description come and join us as part of anglo american platinum these opportunities are available at waterval smelter first preference will be given to relevant applications from surrounding communities anglo american is a global diversified mining business

anglo american learnership opportunities 2023 youthspace - Sep 05 2022

web apr 12 2023 anglo american learnership opportunities 2023 unemployed jobseekers are hereby offered a working to apply for different learnership opportunity interested applicants can choose to apply from any of the following learnerships learnership fitters learnership rigger learnership electricians

anglo american plant learnership programme 2023 2025 - Dec 28 2021

web jun 22 2023 anglo american platinum is hiring and invites applications for the vacant role plant learnership programme 2023 closing date 28 june 2023 reference id ref46392d location kathu south africa anglo american have an exciting position for a plant learnership

learnerships at anglo platinum for 2014 pdf 2023 - May 13 2023

web jun 4 2023 this learnerships at anglo platinum for 2014 pdf that can be your partner anglo platinum learnerships 2014 assets docseducation web anglo platinum learnership 2014 ebooks in pdf mobi epub with isbn isbn785458 and file size is about 59 mb labels apply anglo platinum learnership 2014 there are various anglo american learnerships

cadet process learner anglo american - Jul 15 2023

web sep 8 2023 overview company description come and join us as part of anglo american platinum this opportunity is only available to candidates from the greater rustenburg area as part of the rbmr processor academy programme for 2023

x55 posts anglo american engineering learnerships for 2023 - Jan 29 2022

web apr 14 2023 share via anglo american platinum is recruiting for engineering learnership programmes at various locations sites in south africa locations various closing date varies minimum entry requirements matric with mathematics not mathematics literacy physical science and english all with minimum 40 pass or

de beers kumba iron ore plant learnership sa learnerships - Mar 11 2023

web jun 23 2023 the plant learnership at kumba iron ore offers a 2 year experiential learning program at the sishen mine join our free telegram channel and never miss a learnership again this training program is designed to provide valuable hands on experience and develop skills within the processing discipline job description

available learnerships 2014 by zic zacardo issuu - Jun 14 2023

web oct 23 2014 learnership is fabulous program for graduates of high schools that are interested in getting some work experiences this program offers fresh graduates an opportunity to meet their interest and

learnerships at anglo platinum for 2014 dat slashmobility com - Feb 10 2023

web learnerships at anglo platinum for 2014 chemical operation learnership for nqf 2 from aeci call for submission of evidence for training conducted for anglo platinum mining learnerships and careers anglo american learnerships 2018 2019 online application learnerships 2018 2019 recent and latest learnerships in sars bursaries

anglo american ict learnership programme produces first cohort - Jan 09 2023

web feb 22 2023 mining company anglo american s information and communications technology ict learnership programme in south africa has produced 35 graduates with a set of new digital skills said to be

anglo american platinum amandelbult mine learnerships 2023 - Oct 06 2022

web apr 24 2023 engineering learnership amandelbult complex fitter electrician boilermaker rigger instrumentation diesel mechanic the successful candidates will be afforded an opportunity to enroll in an external unemployed 18 2 b1 three year learnership programme leading to the selected qualification as a qualified artisan

apply anglo platinum learnership 2014 - Aug 04 2022

web apply anglo platinum learnership 2014 3 3 of the coed h coal synthoil and src ii syncrudes as petrochemical feedstocks based on the results of laboratory investigations conversions of the liquid products to petrochemical feedstocks per ton of coal fed to each liquefaction process was 15 0 33 9 26 9 and 23 0 respectively while it is

anglo american amandelbult platinum mines learnerships 2023 - Dec 08 2022

web apr 13 2023 anglo american amandelbult platinum mines invites applications from south african unemployed youth for apply for learnership programme 2023 learnership application closing date 17 april 2023 learnership application location amandelbult complex thabazimbi limpopo

various internship opportunities at anglo american platinum - Apr 12 2023

web sep 6 2023 advertisement the internship programme provides practical work learning and experience to individuals the programme will run for a period of 12 months reference id ref48959v requirements

anglo american internships 2023 2024 graduates24 com - Jun 02 2022

web 1 hour ago anglo american internship programme 2023 2024 anglo american twickenham platinum mine is hereby inviting applications for internships and p1 p2 programmes aimed at equipping unemployed graduates with appropriate work experience the internship programme provides practical work learning and experience to individuals

anglo american platinum cadet process learnerships 2023 2024 - Mar 31 2022

web sep 1 2023 anglo american platinum invites south african unemployed youth to apply for cadet process learnership programme 2023 2024 business unit group function platinum area processing reference id ref49014q location rustenburg south africa job

2023 learnership at anglo american youthspace - Feb 27 2022

web mar 29 2023 2023 learnership at anglo american anglo american hiring unemployed applicants with grade 12 on a 2023 learnership opportunity anglo american platinum strives to empower our neighboring communities

apply anglo platinum learnership 2014 2022 win raid - May 01 2022

web 4 apply anglo platinum learnership 2014 2022 11 19 discover the different approaches firms are taking when it comes to dividends whether you re a seasoned financial professional or just beginning your journey in the world of finance having a firm understanding of the issues surrounding dividends and dividend policy is now more

anglo american platinum engineering learnership 2022 - Nov 07 2022

web anglo american platinum engineering learnership 2022 anglo american platinum opens its learnership programmes in engineering there will be several programmes that you can choose when you become the shortlisted candidates anglo american is a globally diversified business in mining it works from mining processing moving and marketing

tandoori chicken recipe simply recipes - Jul 15 2023

web aug 25 2023 the best chicken for tandoori cooking the key to tandoori chicken is to use bone in thighs and legs yay our favorite cuts because they have enough fat to stay moist under the heat of the grill we don t recommend this dish with chicken breasts they ll dry out too easily

tandoori flame - May 13 2023

web tandoori flame is a restaurant chain based in singapore specializing in north indian cuisine flavors from all over india and global experience right here at the tandoori flame enjoy authentic indian flavors here discover more

what is tandoori spice cravings - Mar 11 2023

web nov 4 2022 what is tandoori tandoori pronounced ton do ree is a style of cooking that places skewers of marinated meat paneer or vegetables into a deep and incredibly hot clay oven this in turn creates pockets of deep char and smoky flavor on the accompanying protein what does tandoori taste like tandoori cooking is like the indian

tandoor wikipedia - Sep 17 2023

web tandoor modern ceramic wood fired tandoors clay tandoors in india a tandoor tæ'n'duər or tɑ:n'duər is a large urn shaped oven usually made of clay originating from punjab and sindh since antiquity tandoors have been used to bake unleavened flatbreads such as roti and naan as well as to roast meat

tandoori chicken wikipedia - Aug 16 2023

web tandoori chicken is a south asian dish of chicken marinated in yogurt and spices and roasted in a tandoor a cylindrical clay oven the dish is now popular world wide the modern form of the dish was popularized by the moti mahal restaurant in the best tandoori chicken in singapore tripadvisor - Jan 09 2023

web best tandoori chicken in singapore singapore find 15 654 tripadvisor traveller reviews of the best tandoori chicken and search by price location and more

indian tandoori chicken food in singapore food advisor - Feb 10 2023

web explore indian tandoori chicken food in singapore with over 1075 places to eat khansama tandoori restaurant little india tandoori corner balestier jaggi s northern indian cuisine race course road

what is tandoori a beginner s guide spice and life - Jun 14 2023

web jan 8 2023 a tandoor is a clay oven that is used to cook food the word tandoor comes from the persian word tanur which means oven or furnace a tandoor usually uses charcoal or wood as fuel it can reach temperatures as high as 900 degrees fahrenheit which is about 480 degrees celsius

what is tandoori the spruce eats - Oct 18 2023

web sep 12 2022 most people seem to think that tandoori is a recipe like many of the world s great dishes this is actually a cooking method that has become synonymous with the food that is prepared put simply tandoori involves marinated meat being cooked over an intense fire in a tandoor a clay oven

oven baked tandoori chicken recipetin eats - Apr 12 2023

web may 1 2019 this is an easy baked tandoori chicken recipe for everyone who happens not to have a tandoor sitting in the middle of your kitchen made with accessible ingredients from scratch chicken is infused with flavour from a yogurt tandoori chicken marinade then baked until golden with little charred bits finger lickin good tandoori

location of evap canister in 1998 pontiac grand prix - Nov 11 2022

web where to download location of evap canister in 1998 pontiac grand prix be done everywhere you want reading a sticker album is afterward kind of augmented answer once you have no sufficient maintenance or epoch to acquire your own adventure this is one of the reasons we con the location of evap canister in as your friend in spending the

location of evap canister in 1998 pontiac grand prix 2022 - Jun 06 2022

web location of evap canister in 1998 pontiac grand prix 3 3 visible evap locator smogwiki compurgung the carbon canister

removes the fuel vapor stored in the carbon canister with an eec controlled evap system the flow of vapors from the canister to the engine is controlled by a evap canister purge solenoid figure 1 or dual evap

location of evap canister in 1998 pontiac grand prix ftp bonide - Feb 14 2023

web 2 location of evap canister in 1998 pontiac grand prix 2023 01 22 the manual provides mil codes obd codes and fault locations code retrieval techniques are described using concise text and clear illustrations in separate sections for each model instructions for retrieval and erasure of trouble codes are provided as well as data link

pontiac grand prix vapor canister purge valve solenoid - Oct 22 2023

web jul 8 2021 obd2 code p0446 in this video we replace the vapor canister purge valve solenoid to correct code p0446 evap emission system vent control circuit the gas cap was checked and found to be

location of evap canister in 1998 pontiac grand prix - Apr 16 2023

web location of evap canister in 1998 pontiac grand prix and numerous books collections from fictions to scientific research in any way in the course of them is this location of evap canister in 1998 pontiac grand prix that can be your partner

location of evap canister in 1998 pontiac grand prix pdf - Jun 18 2023

web we offer you this proper as without difficulty as simple way to get those all we pay for location of evap canister in 1998 pontiac grand prix and numerous books collections from fictions to scientific research in any way in the midst of them is this location of evap canister in 1998 pontiac grand prix that can be your partner location of

q a pontiac grand prix evap canister charcoal canister location - May 17 2023

web justanswer is not intended or designed for emergency questions which should be directed immediately by telephone or in person to qualified professionals where is the evap canister purge valve on a 2001 grand prix gtp

location of evap canister in 1998 pontiac grand prix 2023 - Aug 08 2022

web location of evap canister in 1998 pontiac grand prix downloaded from old syndeohro com by guest huffman lozano mazda mx 5 miata 1 8 enthusiast s workshop manual cengage learning offers students opportunities to strengthen their comprehension of key concepts and to develop their hands on practical shop experience

where is my evap located on a 1998 pontiac grand prix - Aug 20 2023

web which part of the evap system are you looking for there are several components in your evap system if you are looking for the evap canister it is located near the rear of the vehicle either on drivers side near the gas tank or just in front of the gas tank it is a black plastic box with usually 2 vacuum lines running into it if you are going

location of evap canister in 1998 pontiac grand prix pdf - Dec 12 2022

web location of evap canister in 1998 pontiac grand prix 1 location of evap canister in 1998 pontiac grand prix advanced developments in ultra clean gasoline powered vehicles

ebook location of evap canister in 1998 pontiac grand prix - Apr 04 2022

web location of evap canister in 1998 pontiac grand prix can be one of the options to accompany you like having other time it will not waste your time assume me the e book will certainly space you extra thing to read just invest tiny time to right of entry this on line revelation location of evap canister in 1998 pontiac grand prix as

location of evap canister in 1998 pontiac grand prix copy - Mar 03 2022

web location of evap canister in 1998 pontiac grand prix replacing a charcoal canister common symptoms of a bad evap canister evap canister purge valve solenoid operation diagnosis location of the evap canister purge solenoid needed evap vent valve solenoid location where is this part ford s evap system operation

location of a vapor canister on a 2001 pontiac grand prix - Mar 15 2023

web pontiac grand prix mk6 sixth generation 1998 fuse autogenius info pontiac grand prix mk6 feb 26 2017 the underhood fuse block is located on the passenger s side of the vehicle in the engine compartment pontiac grand prix fuse box engine pontiac grand prix 1998 fuse box block circuit breaker

evap canister location for pontiac grand prix 1998 q a justanswer - Sep 21 2023

web where is the evap canister located on a 1998 grand prix answered by a verified pontiac mechanic

download solutions location of evap canister in 1998 pontiac grand prix - Jan 13 2023

web location of evap canister in 1998 pontiac grand prix fundamentals of automotive technology oct 07 2021 resource added for the automotive technology program 106023 automotive diagnostic systems jun 03 2021 obd expert tuner and author keith mccord explains system architecture function and operation he shows you

evap canister 98 gt mustang forums at stangnet - Jul 07 2022

web oct 24 2023 840 jul 8 2023 sonic forums mustang forums 1996 2004 sn95 mustang general talk sn95 4 6l mustang tech where is the evap canister located on a 98 mustang gt shrug i looked in my repair manual but cant find it

location of evap canister in 1998 pontiac grand prix full pdf - May 05 2022

web 4 location of evap canister in 1998 pontiac grand prix 2021 11 14 evap canister vent solenoid valve counterclockwise in order to release it from the locked position raise and support the vehicle refer to lifting and jacking the vehicle where is the evap vent valve solenoid located on a 2005 trouble fueling pump shuts off about every 5

how to change evap canister and purge solenoid on pontiac grand prix - Jul 19 2023

web oct 31 2020 about press copyright contact us creators advertise developers terms privacy policy safety how youtube works test new features nfl sunday ticket press copyright

location of evap canister in 1998 pontiac grand prix - Sep 09 2022

web locate additional book collections we are the best area to plan for your referred book and now your epoch to acquire this

location of evap canister in as one of the compromises has been ready why you have to wait for some days to get or receive the location of evap canister in lp that you order why should you assume it if you can acquire

location of evap canister in 1998 pontiac grand prix 2022 rc - Oct 10 2022

web 2 location of evap canister in 1998 pontiac grand prix 2019 08 28 fundamentals of automotive technology cengage learning automotive enthusiasts who have followed hot rodding trends over the last decade know that gm s ls series engine is the most popular swap on the market similar to the first generation small