

Name: _____ Date: _____

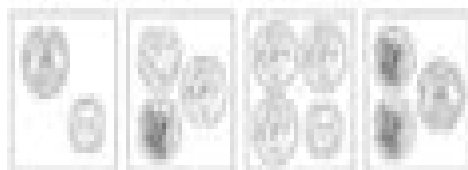
Year 3 NAPLAN Style Numeracy - Set 5

1. What fraction of this shape is shaded?



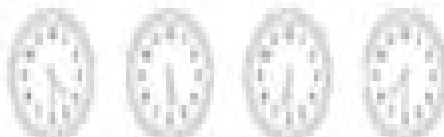
- ☐ $\frac{1}{4}$ ☐ $\frac{1}{2}$ ☐ $\frac{3}{4}$ ☐ $\frac{1}{3}$

2. What group of coins will buy 40c of sweets?



- ☐ A ☐ B ☐ C ☐ D

3. What clock shows the time of 1:45?



- ☐ A ☐ B ☐ C ☐ D

Complete the table.

by length
100m
10m
1m
10cm
1mm

by mass

100g

10g

1g

100kg

10kg

1kg

4. How tall is Tom?

153 000

153



5. What group of shapes is different?

☐ A ☐ B ☐ C ☐ D



6. What group of shapes is different?

☐ A ☐ B ☐ C ☐ D

NAPLAN Style Maths Test



NAPLAN Style Year 3 Numeracy Questions - Set 5

Here are some sample numeracy questions. Make sure that you read each question carefully so that you understand what to do. To answer the questions choose one multiple choice answer or type or draw into the box. There is only one correct answer for each question.

1. What fraction of this shape is shaded?

Score



Forms

interactive



Neplan Test Paper For Year 3

A Loxley



Neplan Test Paper For Year 3:

As recognized, adventure as competently as experience approximately lesson, amusement, as without difficulty as deal can be gotten by just checking out a book **Neplan Test Paper For Year 3** plus it is not directly done, you could consent even more re this life, with reference to the world.

We come up with the money for you this proper as well as simple pretension to get those all. We meet the expense of Neplan Test Paper For Year 3 and numerous book collections from fictions to scientific research in any way. in the middle of them is this Neplan Test Paper For Year 3 that can be your partner.

<https://crm.avenza.com/data/book-search/index.jsp/outlander%20service%20manual.pdf>

Table of Contents Neplan Test Paper For Year 3

1. Understanding the eBook Neplan Test Paper For Year 3
 - The Rise of Digital Reading Neplan Test Paper For Year 3
 - Advantages of eBooks Over Traditional Books
2. Identifying Neplan Test Paper For Year 3
 - 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 Neplan Test Paper For Year 3
 - User-Friendly Interface
4. Exploring eBook Recommendations from Neplan Test Paper For Year 3
 - Personalized Recommendations
 - Neplan Test Paper For Year 3 User Reviews and Ratings
 - Neplan Test Paper For Year 3 and Bestseller Lists
5. Accessing Neplan Test Paper For Year 3 Free and Paid eBooks

- Neplan Test Paper For Year 3 Public Domain eBooks
- Neplan Test Paper For Year 3 eBook Subscription Services
- Neplan Test Paper For Year 3 Budget-Friendly Options
- 6. Navigating Neplan Test Paper For Year 3 eBook Formats
 - ePub, PDF, MOBI, and More
 - Neplan Test Paper For Year 3 Compatibility with Devices
 - Neplan Test Paper For Year 3 Enhanced eBook Features
- 7. Enhancing Your Reading Experience
 - Adjustable Fonts and Text Sizes of Neplan Test Paper For Year 3
 - Highlighting and Note-Taking Neplan Test Paper For Year 3
 - Interactive Elements Neplan Test Paper For Year 3
- 8. Staying Engaged with Neplan Test Paper For Year 3
 - Joining Online Reading Communities
 - Participating in Virtual Book Clubs
 - Following Authors and Publishers Neplan Test Paper For Year 3
- 9. Balancing eBooks and Physical Books Neplan Test Paper For Year 3
 - Benefits of a Digital Library
 - Creating a Diverse Reading Collection Neplan Test Paper For Year 3
- 10. Overcoming Reading Challenges
 - Dealing with Digital Eye Strain
 - Minimizing Distractions
 - Managing Screen Time
- 11. Cultivating a Reading Routine Neplan Test Paper For Year 3
 - Setting Reading Goals Neplan Test Paper For Year 3
 - Carving Out Dedicated Reading Time
- 12. Sourcing Reliable Information of Neplan Test Paper For Year 3
 - Fact-Checking eBook Content of Neplan Test Paper For Year 3
 - 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

Neplan Test Paper For Year 3 Introduction

Neplan Test Paper For Year 3 Offers over 60,000 free eBooks, including many classics that are in the public domain. Open Library: Provides access to over 1 million free eBooks, including classic literature and contemporary works. Neplan Test Paper For Year 3 Offers a vast collection of books, some of which are available for free as PDF downloads, particularly older books in the public domain. Neplan Test Paper For Year 3 : This website hosts a vast collection of scientific articles, books, and textbooks. While it operates in a legal gray area due to copyright issues, its a popular resource for finding various publications. Internet Archive for Neplan Test Paper For Year 3 : Has an extensive collection of digital content, including books, articles, videos, and more. It has a massive library of free downloadable books. Free-eBooks Neplan Test Paper For Year 3 Offers a diverse range of free eBooks across various genres. Neplan Test Paper For Year 3 Focuses mainly on educational books, textbooks, and business books. It offers free PDF downloads for educational purposes. Neplan Test Paper For Year 3 Provides a large selection of free eBooks in different genres, which are available for download in various formats, including PDF. Finding specific Neplan Test Paper For Year 3, especially related to Neplan Test Paper For Year 3, might be challenging as theyre often artistic creations rather than practical blueprints. However, you can explore the following steps to search for or create your own Online Searches: Look for websites, forums, or blogs dedicated to Neplan Test Paper For Year 3, Sometimes enthusiasts share their designs or concepts in PDF format. Books and Magazines Some Neplan Test Paper For Year 3 books or magazines might include. Look for these in online stores or libraries. Remember that while Neplan Test Paper For Year 3, sharing copyrighted material without permission is not legal. Always ensure youre either creating your own or obtaining them from legitimate sources that allow sharing and downloading. Library Check if your local library offers eBook lending services. Many libraries have digital catalogs where you can borrow Neplan Test Paper For Year 3 eBooks for free, including popular titles. Online Retailers: Websites like Amazon, Google Books, or Apple Books often sell eBooks. Sometimes, authors or publishers offer promotions or free periods for certain books. Authors Website Occasionally, authors provide excerpts or short stories for free on their websites. While this might not be the Neplan Test Paper For Year 3 full book , it can give you a taste of the authors writing style. Subscription Services Platforms like Kindle Unlimited or Scribd offer subscription-based access to a wide range of Neplan Test Paper For Year 3 eBooks, including some popular titles.

FAQs About Neplan Test Paper For Year 3 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 web-based 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. Neplan Test Paper For Year 3 is one of the best book in our library for free trial. We provide copy of Neplan Test Paper For Year 3 in digital format, so the resources that you find are reliable. There are also many Ebooks of related with Neplan Test Paper For Year 3. Where to download Neplan Test Paper For Year 3 online for free? Are you looking for Neplan Test Paper For Year 3 PDF? This is definitely going to save you time and cash in something you should think about.

Find Neplan Test Paper For Year 3 :

[outlander 8service manual](#)

[otpc transfer operator manual](#)

[osteacutepathie principes et applications osteacuteoarticulaires](#)

[osha course 700 exam answers](#)

[outstanding eyfs maths planning](#)

[ovation 1869 guitars owners manual](#)

outreach israel news 2014 back issues

oster toaster oven 6058 manual

[our kind of traitor](#)

[outline guide for elementary science reports](#)

[otter creek math timed tests multiplication](#)

[owner manual 2001 suzuki quad runner 500](#)

[outfitters guide wholesale](#)

oster 320user guide
outlook 2010 manual

Neplan Test Paper For Year 3 :

digital signal processing a practical approach ifeavor emmanuel c - May 29 2022

web abebooks com digital signal processing a practical approach 9780201596199 by ifeavor emmanuel c jervis barrie w and a great selection of similar new used and collectible books available now at great prices

pdf digital signal processing a practical approach semantic - Jun 10 2023

web jun 1 1993 this book covers a number of dsp techniques that are of particular relevance to industry such as adaptive filtering and multirate processing and offers modern coverage of the fundamentals implementation and applications of digital signal processing techniques from a practical point of view

digital signal processing emmanuel ifeavor 9780201596199 - Jan 05 2023

web 12 general and special purpose digital signal processors 13 analysis of finite wordlength effects in fixed point dsp systems 14 applications and design studies back cover the second edition of this popular text continues to provide practical coverage of the fundamentals of digital signal processing dsp using real world applications and

digital signal processing a practical approach guide books - May 09 2023

web jan 1 2002 chapter topics include analogue i o interface for real time dsp systems discrete transform the z transform and its applications in signal processing correlation and convolution a framework for digital filter design finite impulse response fir filter design design of infinite impulse response iir digital filters multirate digital

emmanuel ifeavor open library - Jan 25 2022

web apr 29 2008 digital signal processing a practical approach by emmanuel c ifeavor emmanuel ifeavor and barrie jervis first published in 1993 3 editions in 1 language 2 previewable not in library neural networks expert systems in medicine healthcare artificial intelligence series by

digital signal processing a practical approach google books - Sep 13 2023

web emmanuel c ifeavor barrie w jervis prentice hall 2002 adaptive signal processing 933 pages modern coverage of the fundamentals implementation and applications of digital

digital signal processing ifeavor emmanuel et al - Oct 02 2022

web jan 1 2009 emmanuel ifeavor has a brilliant way of teaching his subject this book covers everything and goes above and beyond in his dsp module at the university of plymouth where he is a professor i d buy the second edition though

digital signal processing a practical approach electronic - Mar 27 2022

web digital signal processing a practical approach electronic systems engineering by ifeachor emmanuel c jervis barrie w isbn 10 020154413x isbn 13 9780201544138 addison wesley 1993 hardcover

digital signal processing a practical approach goodreads - Dec 04 2022

web digital signal processing a practical approach emmanuel c ifeachor barrie w jervis 3 69 16 ratings2 reviews want to read buy on amazon rate this book the widespread use of digital signal processing dsp techniques in engineering has made their understanding and mastery vital for today s electrical and electronic engineer

digital signal processing emmanuel c ifeachor barrie w scribd - Sep 01 2022

web digital signal processing emmanuel c ifeachor barrie w jervis pdf free ebook download as pdf file pdf text file txt or read book online for free scribd is the world s largest social reading and publishing site

digital signal processing a practical approach pearson - Mar 07 2023

web oct 17 2001 home engineering electrical engineering advanced digital signal processing digital signal processing a practical approach i m an educator digital signal processing a practical approach 2nd edition published by pearson october 17 2001 2002 emmanuel ifeachor university of plymouth barrie jervis sheffield hallam

digital signal processing 2nd edition by emmanuel c ifeachor - Jul 31 2022

web sep 27 2001 overview view 3 editions details reviews lists related books last edited by marc bot july 30 2019 history edit an edition of digital signal processing 1993 digital signal processing 2nd edition by emmanuel c ifeachor emmanuel ifeachor and barrie jervis 4 00 1 rating 17 want to read 4 currently reading 0 have read

digital signal processing a practical approach ifeachor emmanuel - Feb 23 2022

web digital signal processing a practical approach ifeachor emmanuel jervis barrie 9780201596199 books amazon ca

digital signal processing by emmanuel c ifeachor open library - Jun 29 2022

web digital signal processing by emmanuel c ifeachor emmanuel ifeachor barrie jervis 1993 addison wesley edition in english

digital signal processing emmanuel c ifeachor barrie w - Apr 27 2022

web download digital signal processing emmanuel c ifeachor barrie w jervis pdf free in pdf format

digital signal processing a practical approach ifeachor emmanuel c - Jul 11 2023

web digital signal processing a practical approach ifeachor emmanuel c free download borrow and streaming internet archive

download pdf digital signal processing emmanuel c ifeachor - Nov 03 2022

web download digital signal processing emmanuel c ifeachor barrie w jervis pdf

professor emmanuel ifeachor university of plymouth - Aug 12 2023

web qualifications emmanuel ifeachor is a professor of intelligent electronics systems at plymouth university uk he studied

communication engineering at plymouth university and at imperial college london where he developed a keen interest in signal processing

digital signal processing a practical approach google books - Apr 08 2023

web addison wesley 1993 adaptive signal processing 760 pages covering the modern techniques used in industry such as adaptive filtering spectral estimation and multirate processing this

digital signal processing a practical approach emmanuel c ifeachor - Feb 06 2023

web digital signal processing a practical approach electronic systems engineering series authors emmanuel c ifeachor barrie w jervis edition reprint publisher addison wesley

engineering science n3 april 2013 memo wrbb neu - Apr 30 2022

web the funds for engineering science n3 april 2013 memo and numerous ebook collections from fictions to scientific research in any way among them is this engineering science n3 april 2013 memo that can be your partner

engineering science n3 august 2013 memo pdf ftp popcake - Sep 04 2022

web welcome to ronggui s resume page engineering science n3 august 2013on this page you can read or download

engineering science n3 august 2013 in pdf format if you don t see any interesting for you use our search form on bottom

engineering science n3 august 2013 joomlaxe comon this

n3 engineering science vhembe tvet college - Oct 05 2022

web mar 30 2011 n3 engineering science 30 march 2011 engineering science n3 nov2013qp

engineeringsciencen3april2012qp engineeringsciencen3april2013qp 1 engineeringsciencen3april2013qp

engineeringsciencen3aug2012qp engsciencen3april2010qp engsciencen3aug2008qp

memorandum for engineering science n3 of august copy jda - Jul 02 2022

web n3 qp nov 2013 pdf 1 file s 1 13 mb download engineering science n3 memo aug 2013 pdf 1 file s 206 48 kb download

engineering science n3 qp aug 2013 pdf 1 file s 407 93 kb download engineering science n3 qp apr 2013 pdf 1 file s 2 00 mb

download engineering science n3 memo nov 2012 pdf

engineering science n3 memorandum nov pdf wrbb neu - Jun 01 2022

web engineering science n3 memo aug 2013 pdf file s 206 48 kb download engineering science n3 qp aug 2013 pdf file s 407 93 kb download engineering science n3 prepexamread and download ebook n3 november 2013 memo for engineering

science pdf at public ebook library n3

n3 engineering science november 2016 memorandum - Jan 28 2022

web 1 2 4 power force v wd 2200 9 8 2 357 power 50 817 kwü 11 2 1 2 5 η po 100 pin η 50 7954 100 ü 60 η 84 7 ü 2 1 3 m1 x u1 m2 u2 m1 m2 v

engineering science n3 memorandum 2013 - Aug 03 2022

web science n3 2013 memo socialatedu com engineering science n3 memorandum 2013 faith e4gle org april 2013
orientation sutd edu sg 1 20 engineering science n3 memo kosiva de

engineering science n3 august 2013 memo pdf uniport edu - Jul 14 2023

web jun 18 2023 engineering science n3 august 2013 memo below discrete mathematics for computer science gary haggard
2005 master the fundamentals of discrete mathematics with discrete mathematics for computer science with student
solutions manual cd rom

engineering science n3 2013 memo nc tmuniverse - Nov 06 2022

web science n3 1 august 2013 examination memo engineering science n3 april 2013 memo recognizing the pretentiousness
ways to acquire this books engineering science n3 april 2013 memo is additionally useful you have remained in right site to
begin getting this info acquire the engineering science n3 april 2013 memo colleague that we

engineering science past exam papers and memos mytvvet - Aug 15 2023

web engineering science engineering science n1 n4 past exam papers and memos from the year 2015 to the latest paper n1
n2 n3 n4 2023 new engineering science n1

engineering science tvet exam papers - May 12 2023

web download engineering science past exam papers and memos from 2005 to 2020 engineering science n1 qp memo august
qp memo november engineering science n3 2020 april qp memo august qp n a 2019 april qp memo august qp memo
november qp

engineering science n3 past papers study guides and notes - Mar 10 2023

web may 30 2022 find engineering science n3 previous exam question papers with memorandums for answers 2022 2021
2020 2019 and more prescribed textbooks and study guides most of the resources are in pdf format for easy download

free engineering papers n3 engineering n1 n6 past papers and memos - Feb 09 2023

web the following exam papers are available for sale with their memos in a single downloadable pdf file available papers with
answers november 2020 august 2019 august november 2017 april aug nov 2018 april nov 2016 april aug 2015 aug nov 2014
buy full papers here building drawing n3 download free here get more

free n3 previous papers memos downloads 24 minute lesson - Apr 11 2023

web download free n3 engineering previous papers with memos for revision download your mathematics n3 engineering
science n3 industrial electronics n3 and more

vhembe tvet college geared for excellence - Feb 26 2022

web created date 5 8 2018 7 20 06 am

[national certificate august examination engineering science n3 1 august](#) - Jan 08 2023

[web marking guideline 11 t630 e a1 t engineering science n3 copyright reserved please turn over 7 3 4 v ir v 3 429 1 2 v 4 115 v](#)

n3 engineering science past papers memorandums - Jun 13 2023

[web jun 1 2023 n3 engineering science february 2022 memorandum pdf 149 4 kb n3 engineering science august 2022 question paper pdf 411 9 kb n3 engineering science august 2022 memorandum pdf 208 4 kb n3 engineering science november 2022 question paper pdf 420 7 kb n3 engineering science november 2022](#)

[t580 e m30 t april examination national certificate](#) - Dec 27 2021

[web engineering science n3 time 3 hours marks 100 instructions and information 1 2 answer all the questions all calculations should consist of at least three steps 2 1 2 2 2 3 the formula used or manipulation thereof substitution of the given data in the formula](#)

[engineering science n3 memo november 18 2013 copy](#) - Mar 30 2022

[web nov 18 2013 science n3 memo nov 2013 pdf 1 file s 270 83 kb download engineering science n3 qp nov 2013 pdf 1 file s 1 13 mb download engineering science n3 memo aug 2013 pdf 1 file s 206 48 kb download engineering science n3 qp aug 2013 pdf 1 file s 407 93 kb](#)

[engineering science n3 n4 nated](#) - Dec 07 2022

[web aug 3 2011 nated past papers and memos electrical trade theory electrotechnics engineering drawing engineering science n1 n2 engineering science n3 n4 fitting and machining theory engineering science n3 aug 2011 m engineering science n3 april 2011 m engineering science n4 nov 2012 q engineering science n4 nov](#)

[physics 3rd edition solutions and answers quizlet](#) - Jun 01 2022

[web find step by step solutions and answers to physics 9781591669302 as well as thousands of textbooks so you can move forward with confidence now with expert verified solutions from physics 3rd edition you ll learn how to solve your toughest homework problems our resource for physics includes answers to chapter exercises](#)

[hooke s law example problem science notes and projects](#) - Jan 28 2022

[web mar 12 2018 plug these values into the hooke s law formula since we re looking for the force required to pull the spring apart we don t need the minus sign f k Δx f 20 n m 0 25 m f 5 n answer a force of 5 newtons is needed to pull this spring a distance of 25 cm hooke s law example problem 2](#)

4 4 newton s third law of motion physics openstax - Apr 11 2023

[web newton s third law is useful for figuring out which forces are external to a system recall that identifying external forces is important when setting up a problem because the external forces must be added together to find the net force we can see](#)

newton s third law at work by looking at how people move about

6 1 solving problems with newton s laws openstax - Feb 09 2023

web newton s third law may be used to identify whether forces are exerted between components of a system internal or between the system and something outside external as illustrated in newton s laws of motion the system of interest depends on the question we need to answer only forces are shown in free body diagrams not acceleration or

kinematic equations sample problems and solutions the physics classroom - Mar 30 2022

web these problems allow any student of physics to test their understanding of the use of the four kinematic equations to solve problems involving the one dimensional motion of objects you are encouraged to read each problem and practice the use of the strategy in the solution of the problem

newton s third law ap physics 1 varsity tutors - Jul 14 2023

web correct answer 50n explanation this question is testing your understanding of newton s third law equal and opposite forces the forces between the cat and table depend solely on the mass of the cat therefore the mass of the table is irrelevant the force that the cat applies to the table is simply its weight

lenz s law problems and solutions jee iit ncert physics - Dec 27 2021

web problem 3 using lenz s law determine the direction of the current in resistor ab of fig 3 when a switch s is opened after having been closed for several minutes b coil b is brought closer to coil a with the switch closed c the resistance of r is decreased while the switch remains closed

newtons third law of motion questions and answers topperlearning - Aug 03 2022

web apr 4 2020 cbse ix physics force and laws of motion a truck is hauling a trailer along a level road as figure illustrates the mass of truck is $m_1 = 8500\text{kg}$ and that of the trailer is $m_2 = 27000\text{kg}$ the 2 move with an acceleration of $a = 0.78\text{m/s}^2$ ignore the regarding forces of friction and air resistances

forces and newton s laws of motion physics library khan academy - Nov 06 2022

web unit 3 forces and newton s laws of motion unit 4 centripetal force and gravitation unit 5 work and energy unit 6 impacts and linear momentum unit 7 torque and angular momentum unit 8 oscillations and mechanical waves unit 9 fluids unit 10 thermodynamics unit 11 electric charge field and potential

newton s third law of motion practice khan academy - Aug 15 2023

web newton s third law of motion more on newton s third law what is newton s third law newton s third law of motion all of newton s laws of motion

newtons third law motion questions practice questions with answers - Sep 04 2022

web important newton s third law motion questions with answers 1 how many laws of motion are put forth by newton 3 5 6 7

answer a 3 explanation newton has put forth 3 laws of motion 2 what is the force acting between the sun and the earth
electric force magnetic force gravitational force electromagnetic force answer c gravitational force

5 5 newton s third law general physics using calculus i - Dec 07 2022

web apply newton s third law to define systems and solve problems of motion we have thus far considered force as a push or a pull however if you think about it you realize that no push or pull ever occurs by itself

newton s third law complete toolkit the physics classroom - Jan 08 2023

web to relate newton s third law of motion to the definition of a force to use newton s third law of motion to make a comparison of the magnitude of the individual forces in any interaction to identify the action reaction force pairs for any physical interaction

ch 1 problems exercises college physics openstax - Mar 10 2023

web introduction to dynamics newton s laws of motion 4 1 development of force concept 4 2 newton s first law of motion inertia 4 3 newton s second law of motion concept of a system 4 4 newton s third law of motion symmetry in forces 4 5 normal tension and other examples of forces 4 6 problem solving strategies

6 1 solving problems with newton s laws university physics - Jul 02 2022

web newton s third law may be used to identify whether forces are exerted between components of a system internal or between the system and something outside external as illustrated in newton s laws of motion the system of interest depends on the question we need to answer only forces are shown in free body diagrams not acceleration or

solving problems based on newton s laws geeksforgeeks - Apr 30 2022

web dec 29 2021 newton s third law law of action and reaction the third law of newton states that when two bodies interact with each other they apply forces to one another which are equal in magnitude and opposite in the direction this law is

newton s law problem sets the physics classroom - Oct 05 2022

web problem 1 an african elephant can reach heights of 13 feet and possess a mass of as much as 6000 kg determine the weight of an african elephant in newtons and in pounds given 1 00 n 225 pounds audio guided solution show answer problem 2 about twenty percent of the national football league weighs more than 300 pounds

mathway physics problem solver - Feb 26 2022

web free math problem solver answers your physics homework questions with step by step explanations

6 2 solving problems with newton s laws part 1 physics - Jun 13 2023

web sep 12 2022 we developed a pattern of analyzing and setting up the solutions to problems involving newton s laws in newton s laws of motion in this chapter we continue to discuss these strategies and apply a step by step process

5 5 newton s third law university physics volume 1 openstax - May 12 2023

web state newton s third law of motion identify the action and reaction forces in different situations apply newton s third law to define systems and solve problems of motion we have thus far considered force as a push or a pull however if you think about it you realize that no push or pull ever occurs by itself