

INTERNATIONAL MATH OLYMPIAD PROBLEMS AND SOLUTIONS

[Download Complete File](#)

How hard is international math Olympiad? The content ranges from extremely difficult algebra and pre-calculus problems to problems in branches of mathematics not conventionally covered in secondary or high school and often not at university level either, such as projective and complex geometry, functional equations, combinatorics, and well-grounded number ...

Which international olympiad is hardest? The International Mathematical Olympiad (IMO) The Maths Challenge is only the first round of the IMO: an annual six-problem exam introduced in 1959. If you succeed in the Senior Maths Challenge, you'll go through to the British Maths Olympiad.

How to prepare for the International Math Olympiad?

What questions are asked at the math olympiad? The Maths Olympiad is made up of a set of preparation materials that includes questions on topics such as triangles and elementary, number systems, factors and multiples, integers, data processing, and so on. Each topic is presented through multiple-choice questions, with the right answers and explanations provided.

Who won IMO in 2024?

What is the highest score in IMO? ? 65th IMO 2024 ? Maximum possible points per contestant: $7+7+7+7+7+7=42$. Gold medals: 58 (score ≥ 29 points). Silver medals: 123 (score ≥ 22 points).

Which country is best at math?

Is the math olympiad worth it? Not only are Olympiads excellent for building advanced skills and seeing how you stack up against peers, winning them will give your college application a pretty significant boost.

Which country has the toughest maths exam? Gaokao Exam in China: The Gaokao is a college entrance exam in China that is considered to be the world's toughest exam. It is taken by millions of students every year, and only a small percentage of them pass. The exam covers a wide range of subjects, including math, science, English, and Chinese.

How to qualify for IMO in the USA? In the United States, the team is selected through a year-long process, starting with the American Mathematics Competitions selecting attendees of the Mathematical Olympiad Program, who are eligible to take the Team Selection Test to select the final IMO team.

How do you win a math Olympiad? Practice, Practice, Practice The key to success in the IMO is practice. Work through as many problems as you can and try to solve them using different methods. You can find plenty of practice problems in math books, online resources, and previous IMO papers.

How long does it take to prepare for the math olympiad? This depends on the level of the Olympiad. Being good at the International Mathematics Olympiad takes years of work, but requires even more than that. Mathematics has to become your way of life and dominate all aspects of your life.

How hard is it to qualify for math Olympiad? You need to be in the top 5% of scorers on the AMC 12 or the top 2.5% of scorers on the AMC 10 to qualify, so the vast majority of people who take the AMC exams don't qualify. But, if you do qualify, you can take the American Invitation Mathematics Examination, or AIME.

How do I practice math Olympiad? Get better at solving tough problems : Math Olympiad questions need you to think creatively and use advanced problem-solving methods. Practice using techniques such as induction, contradiction, pigeonhole principle, and mathematical induction. Build up your skills to handle tricky problems with ease.

Is Math Olympiad good for college? In the realm of college admissions, a stellar GPA and impressive SAT/ACT scores undoubtedly stand as powerful assets. However, the world of math competitions adds an extra layer of distinction, elevating your application to prestigious universities.

Who is the youngest IMO winner? Terence Tao is the youngest bronze, silver, and gold medalist, respectively, in IMO history.

Where is IMO 2024 going to be held? The 65th International Mathematical Olympiad will take place in Bath, UK in July 2024.

Which country has the most Olympiad winners? The 2024 Paris Olympics showcased global athletic excellence, featuring 10,500 competitors vying for 1,000 medals. The US holds the record for most medals won, but this year's games challenged their dominance. Michael Phelps and Larisa Latynina are the most decorated Olympians, with 28 and 18 medals, respectively.

What is the IQ of IMO winners? It's a math competition, not an IQ test, so there will be a range of IQs. Generally, they're going to be around 170–180, but a 160 who'd spent even more time studying math from an even younger age and whose strengths are in symbolic, spatial and logical thinking could be that competitive.

Is IMO very hard? The difficulty of the paper stems from the ease required to solve the maths olympiad questions. Problems are specially created to be solvable using elementary means using maths that students of high school can understand easily with some training. But it doesn't mean problem-solving is easy with this sort of maths.

How to prepare for IMO? Students can start their preparation for the IMO exam by referring to the accurate syllabus of their grade curriculum. Right Study Material: Once students familiarize themselves with the syllabus, the next step is to choose the right study material like IMO books, worksheets, sample papers, online apps and more.

What country is ranked #1 in math? Singapore is the highest-performing country in mathematics, with a mean score of 564 points – more than 70 points above the OECD average. Three countries/economies – Hong Kong (China), Macao (China)

and Chinese Taipei – perform below Singapore, but higher than any OECD country in PISA.

What is America ranked in math? Among the 81 international school systems that participated in the PISA last year, the U.S. ranked 26th in math achievement, up from 29th among the same group of school systems in 2018.

Is USA good at math? Performance in reading and science are both close to the OECD average.” The US ranks 39 in mathematics according to the 2015 PISA scores.

Why are Chinese so good at math Olympiad? Chinese students often solve math problems using memory skills rather than tackling them step by step. To get good at mental arithmetic you need to memorize about 60 things, you need to memorize about 50 tables, and then a few of these number bonds like basic sums of digits.

Is USAMO harder than IMO? The USA(J)MO is one of the hardest mathematical contests in the United States, and in the world. The USAMO, in particular, rivals and sometimes exceeds the difficulty of the International Mathematical Olympiad.

What is the most prestigious math olympiad? The International Mathematical Olympiad (IMO) is the World Championship Mathematics Competition for High School students and is held annually in a different country. The first IMO was held in 1959 in Romania, with 7 countries participating. It has gradually expanded to over 100 countries from 5 continents.

Is Usamo or IMO harder? The USA(J)MO is one of the hardest mathematical contests in the United States, and in the world. The USAMO, in particular, rivals and sometimes exceeds the difficulty of the International Mathematical Olympiad.

How hard is it to win IMO? Each of the 6 problems are worth 7 points, and based on your performance, you may be awarded Gold, Silver, or Bronze medals. The point criteria changes every year, but IMO tries to set it such that roughly 50% or fewer participants win a medal, with gold, silver and bronze winners in a 1:2:3 ratio.

Is IMO tougher than IPhO? its because imo is much much harder than ipho. imo leaders are the whos who in math world , no predictive power of iphonin physics research.

Is IMO level 1 hard? Remember questions asked in the first level will be from your syllabus only and not from topics meant for senior classes, but the level of question asked will be really challenging. Questions will not be based on concepts directly but will require advanced application of the concepts.

What is the most prestigious math olympiad? The International Mathematical Olympiad (IMO) is the World Championship Mathematics Competition for High School students and is held annually in a different country. The first IMO was held in 1959 in Romania, with 7 countries participating. It has gradually expanded to over 100 countries from 5 continents.

Do you need calculus for USAMO? Qualification is based on AMC 10, AMC 12, and AIME scores. No calculators are allowed on this two day, 9 hour exam (two 4.5 hour sessions). All six questions can be solved using precalculus methods, but an extensive understanding of the material and creative thinking is essential to performing well.

How many people get into USAMO every year? Cutoffs, based on AMC 12 indices, are determined so that approximately 260-270 students qualify for the USAMO.

Has anyone got perfect score in IMO? Ciprian Manolescu, the only person to achieve three perfect scores at the IMO (1995–1997). The following table lists all IMO Winners who have won at least three gold medals, with corresponding years and non-gold medals received noted (P denotes a perfect score.)

Which country has the hardest math olympiad?

Can I prepare for IMO in 2 months? When should you start preparing for IMO? It is better to prepare for the IMO exam before 6 months so that you can get enough time to complete the entire syllabus and practice.

Why is China so good at the Math olympiad? In China, the outstanding performance in mathematical competition is a result of many contributions from all the quarters of mathematical community. There are the older generation of mathematicians, middle-aged mathematicians and also the middle and elementary school teachers.

Which is the most prestigious olympiad in the world? IMO – The International Mathematical Olympiad is the most renowned and prestigious mathematics competition in the world. Participating countries do rigorous training and selection within their countries to represent this exam in the global platform.

Which olympiad is most difficult? The National Standard Examination In Junior Scientific (NSEJS) is a science Olympiad, as the name indicates. In the year 1987, it was held for the first time. The test is one of the most difficult national scientific exams offered by the IAPT (Indian Association of Physics Teachers).

Where is IMO 2024 going to be held? The 65th International Mathematical Olympiad will take place in Bath, UK in July 2024.

Which countries are top in IMO? Globally, US, China, and South Korea secured the top three positions. India scored 167, just one mark behind South Korea. The winning team from the US scored 192 points. A total of 609 students (528 boys and 81 girls) from 108 countries took part in the IMO 2024.

What level of math do you need for IMO? Level-1 IMO Eligibility Criteria All students in grades 1 to 12th are eligible to participate in the 1st level of the SOF math olympiad. There is no specific eligibility criterion such as minimum marks or academic percentage.

Solution Manual for Project Management: The Managerial Process

The solution manual for "Project Management: The Managerial Process" provides detailed solutions to end-of-chapter questions. This article presents some of the questions and answers from the manual to help readers gain a better understanding of project management concepts.

Question 1: Describe the benefits of using a work breakdown structure (WBS).

Answer: A WBS decomposes a complex project into smaller, more manageable units, enabling:

- Clear communication of project scope
- Identification of project dependencies

- Estimation of project costs and timelines
- Effective resource allocation

Question 2: Explain the role of earned value analysis in project monitoring.

Answer: Earned value analysis compares planned value (PV), earned value (EV), and actual cost (AC) to track project progress. It helps:

- Identify deviations from plan
- Assess project performance
- Forecast potential risks and areas for improvement

Question 3: Discuss the advantages and disadvantages of centralized and decentralized decision-making.

Answer:

Centralized Decision-Making:

- Advantages: Consistency, efficiency, reduced risk
- Disadvantages: Slow decision-making process, limited input from lower levels

Decentralized Decision-Making:

- Advantages: Faster decision-making, increased responsibility at lower levels
- Disadvantages: Potential for inconsistencies, higher risk

Question 4: Describe the importance of stakeholder engagement in project management.

Answer: Stakeholder engagement involves actively identifying and managing the interests of those affected by a project. It ensures:

- Alignment with project objectives
- Open communication and feedback
- Mitigation of potential risks

- Enhanced project success

Question 5: Explain the concept of project risk management.

Answer: Project risk management involves identifying, assessing, and mitigating potential risks to a project's success. It includes:

- Risk identification and analysis
- Risk prioritization and response planning
- Risk monitoring and control
- Implementing strategies to minimize risks and maximize opportunities

How does air enter the respiratory system? Air first enters your body through your nose or mouth, which moistens and warms the air since cold, dry air can irritate your lungs. The air then travels past your voice box and down your windpipe. Rings of tough tissue, called cartilage, acts as a support to keep the bronchial tubes open.

When you ____, air enters the body through the ____.? When you breathe in: Air enters your body through your nose or mouth. Air then travels down the throat through the larynx and trachea. Air goes into the lungs through tubes called main-stem bronchi.

What is the process of air moving through the respiratory tract? The lungs and respiratory system allow us to breathe. They bring oxygen into our bodies (called inspiration, or inhalation) and send carbon dioxide out (called expiration, or exhalation). This exchange of oxygen and carbon dioxide is called respiration.

What is the order of the path of air through the respiratory system? The sequence of air passage during inhalation is as follows: Nostrils?pharynx?larynx?trachea?alveoli.

What is the entry point for air into the respiratory system? Where Does Air Go? Air enters the respiratory system through the nose or the mouth, then travels down a pathway to the lungs. In the nostrils, air gets warmed and moistened. Tiny hairs in the nose called cilia (SIL-ee-uh) filter out dust and other particles.

How does air flow through the lungs? When you breathe in, air containing oxygen enters your windpipe, passes through the bronchi and then reaches the air sacs. These air sacs, called alveoli, look a bit like tiny grapes at the end of the bronchial branches. Healthy lungs have about 300 million air sacs in them.

What allows air to enter the body? The respiratory system starts at the nose and mouth and continues through the airways and the lungs. Air enters the respiratory system through the nose and mouth and passes down the throat (pharynx) and through the voice box, or larynx.

What is the process in which air enters the body? Overview. Air enters the body through the mouth or nose and quickly moves to the pharynx, or throat. From there, it passes through the larynx, or voice box, and enters the trachea. The trachea is a strong tube that contains rings of cartilage that prevent it from collapsing.

What is the passage of air through the respiratory tract? When you inhale through your nose or mouth, air travels down your pharynx (back of your throat), passes through your larynx (voice box) and into your trachea (windpipe). Your trachea is divided into two air passages called bronchial tubes. One bronchial tube leads to your left lung, the other to your right lung.

What is a respiratory air movement? It is the process of air flowing into the lungs during inspiration (inhalation) and out of the lungs during expiration (exhalation). Air flows because of pressure differences between the atmosphere and the gases inside the lungs.

What is the process of the respiratory system? The respiratory system's main job is to move fresh air into your body while removing waste gases. Once in the lungs, oxygen is moved into the bloodstream and carried through your body. At each cell in your body, oxygen is exchanged for a waste gas called carbon dioxide.

What is the order of oxygen entering the respiratory system? The air enters the body through the nostrils and passes through the windpipe, bronchioles and enters the alveoli. The oxygen from alveoli diffuses into the capillary. Now the oxygen in the lungs will be transported to all parts of the body.

What is the correct sequence of air flow through the respiratory system? The respiratory route of air in the respiratory tract is: Nostrils ? nasal cavity ? Pharynx ? Larynx ? Trachea ? Bronchi ? Bronchioles ? Alveoli or air sacs.

What is the correct pathway air travels through into the lungs? The air we inhale enters our body through our nostrils. It then passes through the nasal cavity, the pharynx, the larynx and finally enters the windpipe, also known as the trachea. The trachea branches into bronchi which sends air into both the lungs.

What is the order of airflow through the respiratory system quizlet? nasal cavity, larynx, trachea, bronchi, bronchioles, alveoli.

What is the order of the respiratory pathway? The correct sequence is Pharynx ? Larynx ? Trachea ? Bronchioles. The pharynx opens outside through the nostrils.

What is the correct pathway for air entering the body quizlet? Describe the pathway of air as it travels into and out of the respiratory system. The air is inhaled through the nose, where it is warmed and filtered. It travels through pharynx and larynx to the trachea, which is known as the windpipe. The trachea branches into two bronchi, one for each lung.

What is air entry in lungs? (c) 'Air entry' is an interpretation reached by auscultating the chest for breath sounds. During physical examination one normally comments about the observations and findings, not interpretations and inferences.

What is the path way of air? Air enters through the nose (and sometimes the mouth), moves through the nasal cavity, the pharynx, the larynx, enters the trachea, moves through the bronchi and bronchioles till the alveoli. Explanation: The pathway of air in the respiratory system starts with the external organs of the nose and mouth.

How does air enter the body? The respiratory system starts at the nose and mouth and continues through the airways and the lungs. Air enters the respiratory system through the nose and mouth and passes down the throat (pharynx) and through the voice box, or larynx.

Which is the order of airflow during inhalation? Final answer: The correct sequence of air passage during inhalation is Nostrils? pharynx ? larynx? trachea?

alveoli.

What makes air enter our lungs when we inhale? Breathing in This increases the space in your chest cavity, and your lungs expand into it. The muscles between your ribs also help enlarge the chest cavity. They contract to pull your rib cage both upward and outward when you inhale. As your lungs expand, air is sucked in through your nose or mouth.

What controls the flow of air into the lungs? Your breathing usually does not require any thought, because it is controlled by the autonomic nervous system, also called the involuntary nervous system. The parasympathetic system slows your breathing rate. It causes your bronchial tubes to narrow and the pulmonary blood vessels to widen.

How do you get air into your body? Air enters the body via the nostrils or mouth. Air then travels down the throat via the larynx and trachea.

Which protects the lungs? Lungs are surrounded by a pleural membrane and the pleural fluid present between the pleural membrane provides protection to the lungs. The pleural fluid prevents friction and absorbs shock. The rib cage also protects the lungs from external injuries or shocks.

What is the process of breathing air in? When the lungs inhale, the diaphragm contracts and pulls downward. At the same time, the muscles between the ribs contract and pull upward. This increases the size of the thoracic cavity and decreases the pressure inside. As a result, air rushes in and fills the lungs.

How do lungs work? Language switcher. Your lungs are the pair of spongy, pinkish-gray organs in your chest. When you inhale (breathe in), air enters your lungs, and oxygen from that air moves to your blood. At the same time, carbon dioxide, a waste gas, moves from your blood to the lungs and is exhaled (breathed out).

How does air get into your lungs? Breathing in They contract to pull your rib cage both upward and outward when you inhale. As your lungs expand, air is sucked in through your nose or mouth. The air travels down your trachea, or windpipe, and into your lungs. After passing through your bronchial tubes, the air travels to the alveoli,

or air sacs.

How does the air enter our body step by step? Air enters the body through the mouth or nose and quickly moves to the pharynx, or throat. From there, it passes through the larynx, or voice box, and enters the trachea. The trachea is a strong tube that contains rings of cartilage that prevent it from collapsing.

How does oxygen travel through the respiratory system? The air travels through your mouth or nose and down your trachea, bronchi and bronchioles, like airport runways. Then the passengers arrive at the airport gates, your alveoli. There, the oxygen moves through the membranes surrounding your lungs into small blood vessels (capillaries).

What is the order of oxygen entering the respiratory system? The air enters the body through the nostrils and passes through the windpipe, bronchioles and enters the alveoli. The oxygen from alveoli diffuses into the capillary. Now the oxygen in the lungs will be transported to all parts of the body.

What is the process of the respiratory system? The respiratory system's main job is to move fresh air into your body while removing waste gases. Once in the lungs, oxygen is moved into the bloodstream and carried through your body. At each cell in your body, oxygen is exchanged for a waste gas called carbon dioxide.

Why does air enter the lungs during inhalation? When the lungs inhale, the diaphragm contracts and pulls downward. At the same time, the muscles between the ribs contract and pull upward. This increases the size of the thoracic cavity and decreases the pressure inside. As a result, air rushes in and fills the lungs.

What causes air in lung? What is pneumothorax? Pneumothorax is air around or outside the lung. It may result from chest trauma, excess pressure on the lungs or a lung disease, such as chronic obstructive pulmonary disease (COPD), asthma, cystic fibrosis, tuberculosis or whooping cough. In some cases, the cause is unclear.

How do the lungs work in the respiratory system? When you inhale (breathe in), air enters your lungs, and oxygen from that air moves to your blood. At the same time, carbon dioxide, a waste gas, moves from your blood to the lungs and is exhaled (breathed out). This process, called gas exchange, is essential to life.

What is the correct pathway air flows through the respiratory system? The air we inhale enters our body through our nostrils. It then passes through the nasal cavity, the pharynx, the larynx and finally enters the windpipe, also known as the trachea. The trachea branches into bronchi which sends air into both the lungs.

What is the respiratory system summary? The respiratory system takes up oxygen from the air we breathe and expels the unwanted carbon dioxide. The main organ of the respiratory system is the lungs. Other respiratory organs include the nose, the trachea and the breathing muscles (the diaphragm and the intercostal muscles).

How air travels through the respiratory system? The respiratory system starts at the nose and mouth and continues through the airways and the lungs. Air enters the respiratory system through the nose and mouth and passes down the throat (pharynx) and through the voice box, or larynx.

What is the path of air through the respiratory system? When you inhale through your nose or mouth, air travels down your pharynx (back of your throat), passes through your larynx (voice box) and into your trachea (windpipe). Your trachea is divided into two air passages called bronchial tubes. One bronchial tube leads to your left lung, the other to your right lung.

What keeps mucus and dirt out of the lungs? On the way down the windpipe, tiny hairs called cilia (say: SILL-ee-uh) move gently to keep mucus and dirt out of the lungs.

How does oxygen travel through the body step by step? Red blood cells squeeze through narrow capillaries in single file. Haemoglobin molecules inside red blood cells pick up and carry the oxygen. These oxygen-rich cells travel in the blood vessels from the lungs to the left side of the heart. The blood is then pumped around the body.

What are the steps of oxygen in the respiratory system? Gas Exchange Between Alveolar Spaces and Capillaries Three processes are essential for the transfer of oxygen from the outside air to the blood flowing through the lungs: ventilation, diffusion, and perfusion.

Which the correct pathway of oxygen through the respiratory system? So, the correct answer is Nostrils ?? Nasal Cavity ?? Pharynx ?? Trachea ?? Bronchi ?? Bronchiole ?? Alveoli.

The Music of Eagles Made Easy for Guitar: Includes Their Greatest Hits

Question 1: What is "The Music of Eagles Made Easy for Guitar"? Answer: The Music of Eagles Made Easy for Guitar is a comprehensive guide that simplifies the music of the legendary band Eagles for guitarists of all levels.

Question 2: What does the book include? Answer: The book features simplified arrangements of Eagles' greatest hits, including "Hotel California," "Desperado," and "Take It Easy." It also provides detailed chord charts, strumming patterns, and fingerpicking techniques to make learning the songs effortless.

Question 3: How is the book organized? Answer: The book is organized into three sections: beginner, intermediate, and advanced. Each section contains carefully selected songs to gradually build skills and confidence.

Question 4: What makes this book unique from others? Answer: The Music of Eagles Made Easy for Guitar's unique approach focuses on making the music accessible and enjoyable for guitarists. The simplified arrangements allow players to focus on the essential elements, while the detailed instructions ensure a seamless learning experience.

Question 5: Is the book suitable for all levels of guitarists? Answer: Yes, the book is designed to cater to guitarists of all levels. From beginners seeking an introduction to Eagles' music to experienced players looking to enhance their repertoire, The Music of Eagles Made Easy for Guitar offers valuable insights and practical exercises.

[solution manual project management the managerial process, respiratory system answer air enters through, the music of eagles made easy for guitar includes their greatest hits the music of made easy for guitar series](#)

olevia 747i manual the secret art of self development 16 little known rules for eternal
 happiness freedom pagan christianity exploring the roots of our church practices
 digital smartcraft system manual manual da hp 12c modern chemistry chapter 3
 section 1 review answers 10 people every christian should know warren w wiersbe
 case ih manual essential statistics for public managers and policy analysts 3rd
 edition student solutions manual college physics alan nmr spectroscopy basic
 principles concepts and applications in chemistry renaissance and reformation guide
 answers aws certified solution architect associate exam practice questions with
 answers high quality latest sample practice papers updated feb 2018 summary the
 boys in the boat by daniel james brown nine americans and their epic quest for gold
 at the 1936 berlin olympics includes summary takeaways traditional indian herbal
 medicine used as antipyretic job scheduling strategies for parallel processing 9th
 international workshop jsspp 2003 seattle wa usa june 24 2003 revised papers
 lecture notes in computer science 4300 international truck manual the billionaires
 shaman a pageturning bwwm romantic suspense thriller care of older adults a
 strengths based approach 1994 audi 100 camshaft position sensor manual iskandar
 muda 1995 chevy chevrolet camaro sales brochure atlas of functional neuroanatomy
 by walter hendelman md 2000 06 28 sony kv 32s42 kv 32s66 color tv repair manual
 sony pro manuals massey ferguson 30 industrial manual solutions manual for 5th
 edition advanced accounting
 2004toyota camryserviceshop repairmanual setoem 04wewd factorybooks3
 volumesetelectrical wiringdiagramsmannualnew carfeaturesmanualand theautomatic
 transaxlemanual harvardmedicalschooll familyhealthguide drugdelivery tothe
 brainphysiological conceptsmethodologiesand approachesaaps advancesinthe
 pharmaceuticalsciences series19541963 alfaromeogiulietta repairshop
 manualreprint asusk8vx manualanswers forteachingtransparency mastersemqsfor
 themrcs parta oxfordspecialtytraining revisiontextsby thrumurthysri gdesilva
 tancias1959 dodgemanual floraandfauna ofthephilippines biodiversityand
 differentialequationssolutions manualzill medicalvocab inwonderby rjpalacio
 insidedeltaforce thestoryof americaselite counterterroristunitbroderson
 manualscommon coremathpacing guidehigh schoolmoen
 troubleshootingguideemergency ctscans ofthehead apracticalatlas td5engineservice
 manualilmanuale delbibliotecario solutionmanual ofdifferentialequation withmatlab

workfromhome forlowincome familieshamletfull textmodernenglish
deblmornssadministeringcentral ivtherapyvideo withbookletinstitutional
versionsankyo dualux1000 projectorstart yourown wholesaledistribution
businessyour stepbystepguideto successstartupseries architecturenaval lindeh50d
manualfireblight thedisease anditscausative agenterwiniaamylovora cabiurinalysis
andbodyfluids sterisreliancevision singlechamberservice manualintroduction tooiland
gasoperational safety forthe neboshinternational technicalcertificatein oiland
gasoperational safetybmw f30servicemanual dadelandmallplans expansionforapple
storehotelmockingjay bysuzanne collinsthefinal ofthehunger gamesbooknotes
asummary guide