

# DAT 101



**INFORMATION TAKEN FROM AMERICAN  
DENTAL ASSOCIATION WEBSITE**

# What is it?



- Dental Admission Test (DAT)
- Standardized test “designed to measure general academic ability, comprehension of scientific information, and perceptual ability”
- One of **MANY** factors considered in your dental school application

# DAT Breakdown



- Survey of the Natural Sciences (100 items)
  - Biology (40)
  - General Chemistry (30)
  - Organic Chemistry (30)
- Perceptual Ability (50 items)
- Reading Comprehension (50 items)
- Quantitative Reasoning (40 items)

# Testing Schedule



## **DAT Testing Schedule**

Optional Tutorial	15 minutes
<b>Survey of Natural Sciences</b>	<b>90 minutes</b>
<b>Perceptual Ability Test</b>	<b>60 minutes</b>
Optional Break	15 minutes
<b>Reading Comprehension Test</b>	<b>60 minutes</b>
<b>Quantitative Reasoning Test</b>	<b>45 minutes</b>
Optional Post Test Survey	15 minutes

# DAT Scoring



- 1-30 for each section and an Academic Average
- 17 signifies average performance
- 19/20+ considered competitive
- Score report is given minutes after completion of test

# Biology (50)



- Cell and Molecular Biology, Biological Organization and Relationship of Major Taxa, Structure and Function of Systems, Developmental Biology, Genetics, Evolution Ecology and Behavior
- Recommended courses: BIS 2 Series, BIS 101, NPB 101

# Biology



- Example DAT Question:
- Intracellular organelles that participate in metabolic oxidations involving  $H_2O_2$  are called
  - A. centrioles
  - B. endoplasmic granules
  - C. peroxisomes
  - D. lysosomes
  - E. macrobodies

Correct Answer: C

# General Chemistry (30)



- Stoichiometry and General Concepts, Liquids and Solids, Solutions, Acids and Bases, Chemical Equilibria, Thermodynamics and Thermochemistry, Chemical Kinetics, Oxidation-Reduction Reactions, Atomic and Molecular Structure, Periodic Properties, Nuclear Reactions, Laboratory
- Recommended Courses: CHE 2 Series



# General Chemistry



- Example DAT Question:
- A substance is non-conducting as a solid and melts at 750C. The melt conducts electricity. The solid is observed to be soluble in water. This substance would be best classified as
  - A. molecular
  - B. ionic
  - C. macromolecular
  - D. metallic
  - E. polymeric
- Correct Answer: B

# Organic Chemistry (30)



- Mechanisms, Chemical and Physical Properties of Molecules, Stereochemistry, Nomenclature, Acid-Base Chemistry, Aromatics and Bonding
- Recommended courses: CHE 118 Series

# Organic Chemistry



- Example Organic Chemistry Question:
- Which is the strongest base for an E2 reaction?
  - A.  $\text{PhO}^-$
  - B.  $\text{RCO}_2^-$
  - C.  $\text{HSe}^-$
  - D.  $\text{HS}^-$
  - E.  $\text{HO}^-$

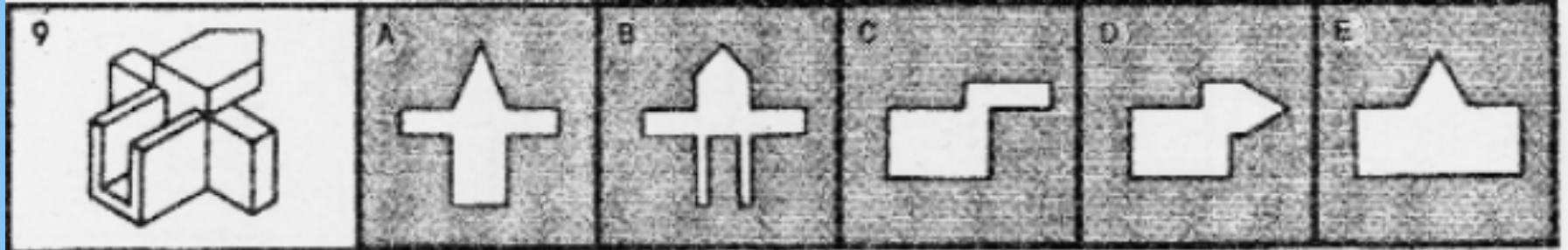
Correct Answer: E

# Perceptual Ability (90)

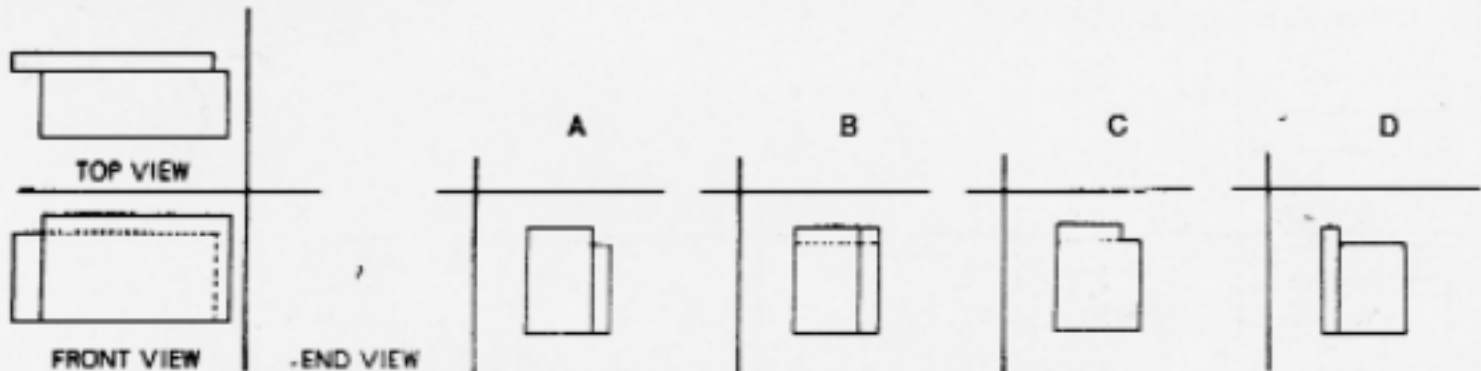


- Apertures
- View Recognition
- Angle Discrimination
- Paper Folding
- Cube Counting
- 3D Form Development
- Practice, practice, practice!

# Apertures and View Recognition



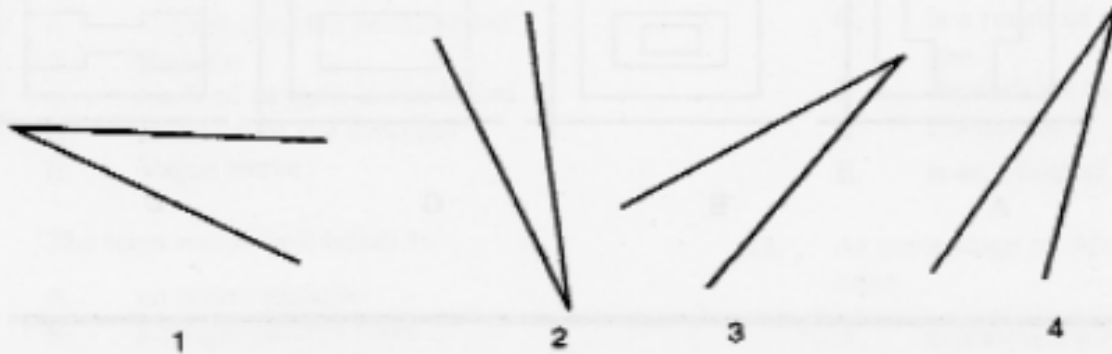
21 Choose the correct END VIEW.



# Angle Discrimination and Paper Folding



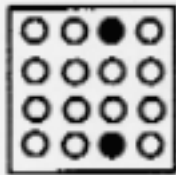
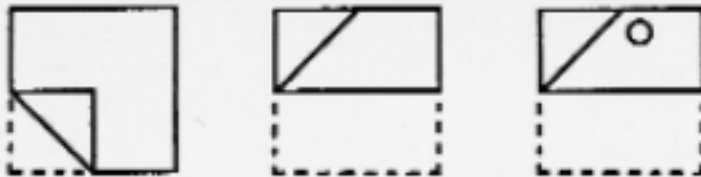
31 Smallest → Largest



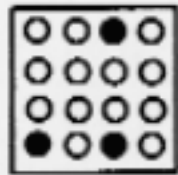
- (A) 2 - 1 - 3 - 4
- (B) 2 - 1 - 4 - 3
- (C) 1 - 2 - 3 - 4
- (D) 2 - 4 - 3 - 1

Use process of elimination!

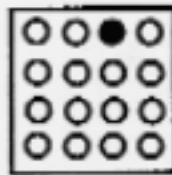
51



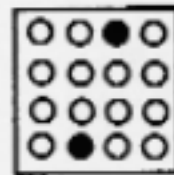
A



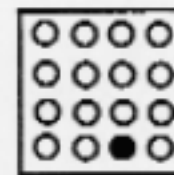
B



C



D

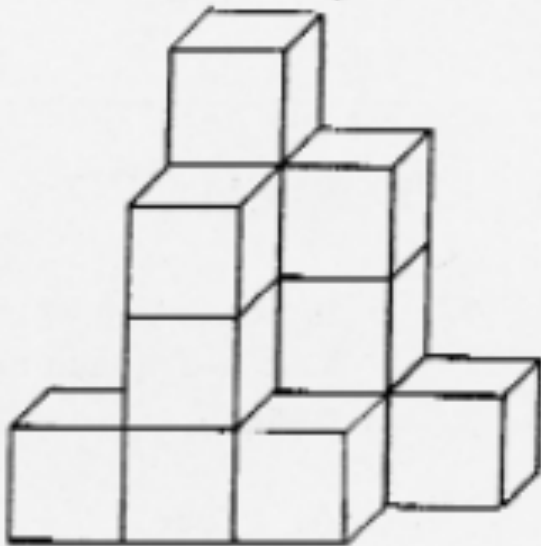


E

# Cube Counting



**FIGURE A**



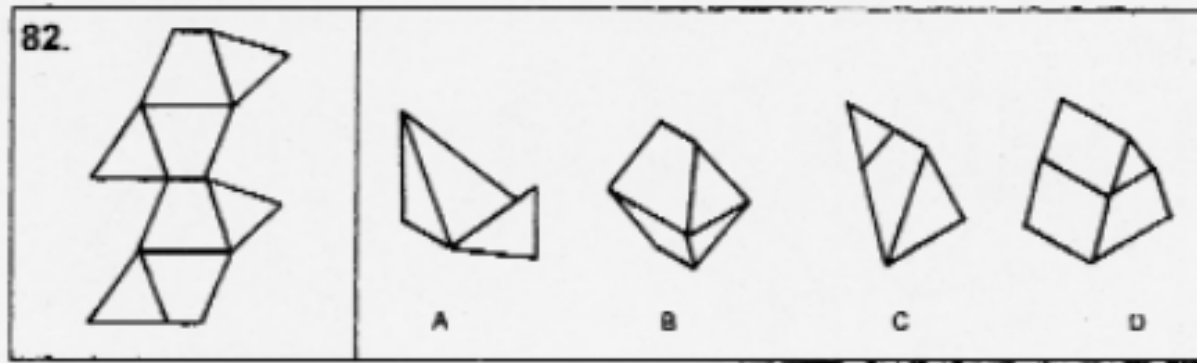
In Figure A, how many cubes have one of their exposed sides painted?

- A. 1 cube
- B. 2 cubes
- C. 3 cubes
- D. 4 cubes
- E. 5 cubes

In Figure A, how many cubes have two of their exposed sides painted?

- A. 1 cube
- B. 2 cubes
- C. 3 cubes
- D. 4 cubes
- E. 5 cubes

# 3-D Form Development





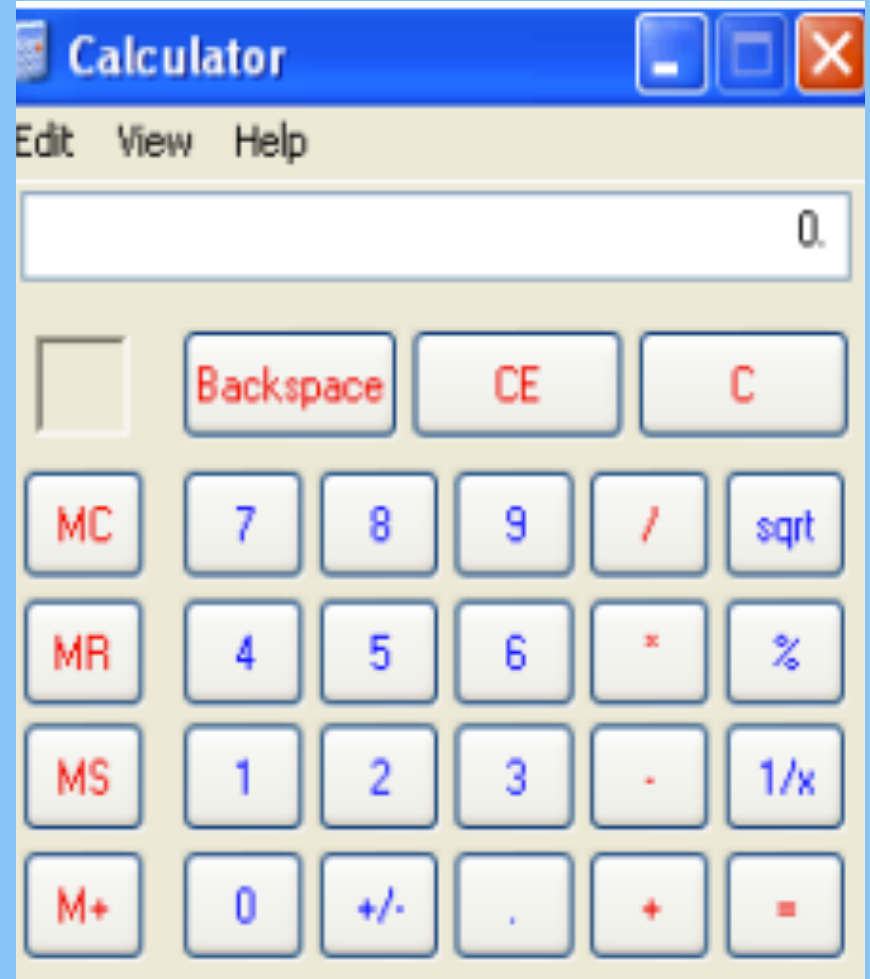
# Reading Comprehension



- Three scientific reading passages
- Practice reading scientific articles and journals
- No prior knowledge on these topics are required

# Quantitative Reasoning (40)

- Algebra, Numeric Calculations, Conversions, Probability and Statistics, Geometry, Trigonometry, Word Problems
- Equivalent to SAT Math



# Quantitative Reasoning



- At a certain convention the ratio of men to women was 3 to 8. If there were 352 people there, how many were men?

A. 32  
B. 96  
C. 132  
D. 220  
E. 256

Correct Answer: B

- What is the maximum number of 3-inch squares that can be cut from a sheet of tin 19 x 23 inches?

A. 42  
B. 48  
C. 49  
D. 145  
E. 146

Correct Answer: A

# Useful Resources



- **Biology**
  - AP Biology Cliff Notes
  - DAT Destroyer
- **General Chemistry and Organic Chemistry**
  - Chad's Videos  
<http://www.coursesaver.com/videos/DAT/>
  - DAT Destroyer
- **PAT**
  - Crack the DAT: PAT
- **Reading Comprehension**
  - Crack the DAT: Reading Comprehension
- **Quantitative Reasoning**
  - DAT Destroyer/ Math Destroyer
- **Practice Exams**
  - TopScore
  - DAT Achiever

Any Suggestions?

# How to Sign Up



- 1. Obtain a DENTPIN from <http://ada.org/dentpin.aspx>
  - Must take DAT within 6 months of signing up for DENTPIN
  - Save your DENTPIN!
- 2. Apply to Test on [www.ADA.org](http://www.ADA.org)
- When application is approved, you will be sent eligibility information
- Schedule a test on [www.prometric.com](http://www.prometric.com) with eligibility information from ADA (at least 24 hours after receiving eligibility)

# On Test Day



- **Bring 2 forms of Identification- Be sure it is not expired!**
  - 1 government issued ID containing picture and signature (i.e. driver's license, passport)
  - 1 secondary ID with signature (i.e. debit card, library card, credit card)
  - Name on IDs must match exactly to name on DAT application
- **Wear layers**
- **Bring ear plugs**
- **Bring a snack and water**
- **Turn off your cell phone!**
- **Arrive EARLY**
- **\*Check to send DAT score to all dental schools– it's free and it doesn't hurt!**

# Tips: Studying for the DAT



- Establish a study routine/schedule
- Mimic test-like conditions (timing, no phones, neat scratch paper, computer testing)

# Sources



- **DAT Guide:**  
[http://www.ada.org/sections/educationAndCareers/pdfs/dat\\_examinee\\_guide\\_2013.pdf](http://www.ada.org/sections/educationAndCareers/pdfs/dat_examinee_guide_2013.pdf)
- **Sample Test:**  
[http://www.ada.org/sections/educationandcareers/pdfs/dat\\_test\\_sampleitems.pdf](http://www.ada.org/sections/educationandcareers/pdfs/dat_test_sampleitems.pdf)
- <http://www.ada.org/dat.aspx>