Ways to work through the final

- Work straight through, bubbling answers as you go.
- Work straight through, circling answers in answer book, bubble during last 10 minutes.
- Work easy problems first, circling answers in answer book so you can skip around, bubble during last 10 minutes.

If you bubble as you work through the test...

...make a guess before moving on.

#1. ssdslfj l dfjsd fsld flsdj dlfj sldkfj sldfs ldkf
A. sdfsdf
B. sdfsdl
C. sdfljklj
D. sdfjlkj

#2. ssdslfj l dfjsd fsld flsdj dlfj sldkfj sldfs ldkf
A. sdfsdf
B. sdfsdl
C. sdfljklj
D. sdfjlkj

#3. ssdslfj l dfjsd fsld flsdj dlfj sldkfj sldfs ldkf
A. sdfsdf
B. sdfsdl
C. sdfljklj
D. sdfjlkj

#4. ssdslfj l dfjsd fsld flsdj dlfj sldkfj sldfs ldkf
A. sdfsdf
B. sdfsdl
C. sdfljklj
D. sdfjlkj

Strategies:

- Answer every question, even if it is a complete guess

  - no penalty for wrong answers.
  - unanswered questions are automatically wrong.

- If you can eliminate one or more answers as definitely wrong, it helps you move toward the correct answer (or improve chances if guessing).

Don't rush: (geometry)

Which is better?

Rush	Don't Rush
- answer all questions	- run out of time and have to randomly guess last 8 questions
- miss 1/4 due to rushing	- don't miss any due to rushing

Don't rush: (geometry)

Which is better?

Rush	Don't Rush
- answer all questions	- run out of time and have to randomly guess last 8 questions
- miss 1/4 due to rushing	- don't miss any due to rushing
You'll miss 12 questions = 76% (C)	Guessing, you'll get 3 out of 4 wrong, so you'll miss 6 questions due to random guessing being wrong = 88% (B)

Don't rush: (honors algebra 3-4)

Which is better?

Rush	Don't Rush
- answer all questions	- run out of time and have to randomly guess last 8 questions
- miss 1/4 due to rushing	- don't miss any due to rushing

Don't rush: (honors algebra 3-4)

Which is better?

Rush	Don't Rush
- answer all questions	- run out of time and have to randomly guess last 8 questions
- miss 1/4 due to rushing	- don't miss any due to rushing
You'll miss 10 questions = 75% (C)	Guessing, you'll get 3 out of 4 wrong, so you'll miss 6 questions due to random guessing being wrong = 85% (B)

Where should you spend most of your time? On the hard questions, or the easy questions?

Answer: On the easy questions.

Reason: On questions you don't really understand there is a good chance you could get them wrong even if you spend a lot of time on them.

On easy questions that you do understanding you will probably get them right as long as you don't make simple mistakes (forget to distribute a negative, incorrect simplification, plugging something wrong in your calculator, etc.)

Every problem, easy or hard, counts the same. So it's better to make sure to take the time to get all the easier questions correct.

More strategies (honors algebra 3-4)...

- Sometimes, it is easier to try the answers given (work backward), then to solve the problem in normal direction.

51. Solve for x: $\log_4 x + \log_4 (x+2) = \log_4 (3x+56)$

A -54
B -7
C -7, 8
D 8

46. Solve for x: $4^{2x-7} = 1024$

A $\frac{1}{5}$
B 5
C 6
D 131.5

More strategies (honors algebra 3-4)...

- For many problems, you can check your answers and see if they are right during the test.
- **Always check square roots** (extraneous solutions), **logarithms** (for negatives), and **fractions** (for zero denominators).

5. Solve for x: $\sqrt{2x+7}-x=2$.

A -3
B 1
C -3, 1
D -1, 3

1. Factor the following completely:

a. $2x^2-7x-15$

A $(2x-5)(x+3)$
B $(2x+3)(x-5)$
C $(2x+5)(x-3)$
D $(2x-1)(x-15)$

More strategies (honors algebra 3-4)...

- Is there a way to solve (or check answer) by graphing or verifying with your calculator?

17. Find all the values of x such that $f(x) = (x+1)(x^2-4) > 0$.

A $(-\infty,-2) \cup (-1,2)$
B $(-\infty,-2) \cup (2,\infty)$
C $(-2,-1) \cup (-1,2)$
D $(-2,-1) \cup (2,\infty)$

(where is graph above x-axis (>0)?)

16. Find the domain of $f(x) = \frac{2x}{\sqrt{x+4}}$.

A $(-4,4)$
B $(-4,\infty)$
C $[-4,\infty)$
D $(4,\infty)$

(calculator won't graph except where domain exists)

27. Find the horizontal or slant asymptote(s): $f(x) = \frac{2x-1}{x}$

A $x = 0$
B $x = \frac{1}{2}$
C $y = 2x$
D $y = 2$

(verify asymptote visually from graph)

29. Divide, then express your answer in standard form: $\frac{8-7i}{1-2i}$

A $-\frac{6}{5} - \frac{23}{5}i$
B $-\frac{22}{3} - 3i$
C $2 + \frac{23}{3}i$
D $\frac{22}{5} + \frac{9}{5}i$

(calculators can do complex number arithmetic)

Suggested procedure:

- Do all work in test booklet, wait to bubble until 10 minutes before end of test.
- Start with problem 1 and work straight through once. For each problem:
  - Know how to do it immediately or pretty sure it won't take long?
    Do the problem carefully and circle the correct answer in test booklet.
  - Don't know how to start it, or solution will take a very long time?
    Mark problem in test booklet with a star and move on to next problem.
- Get to end of test? Go back and work starred problems, marking in test book.
- When '10 minutes left' is announced, stop wherever you are and start bubbling answers for problems you've answered. Make sure you are bubbling the spot with the number that matches the answer. When done bubbling, continue working problems until you run out of time.
- If '1 minute left' is announced, and you are not done, stop and randomly bubble any remaining problems.

Remember: it is better to spend time on the problems you are more likely to get right than on the problems you are more likely to get wrong.