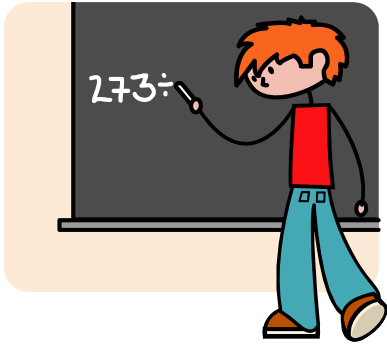


UIL Mathematics Contest



Practice and Test Taking Tips For Coaches



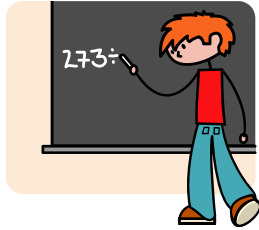
Larry White

UIL State Mathematics Contest Director

texasmath@centex.net

<http://www.uiltexas.org/academics/mathematics>

UIL Mathematics Contest

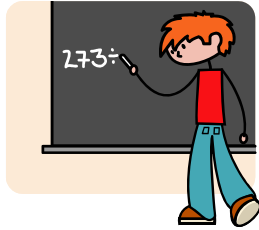


Contest Information and Rules

- **60 multiple choice problems**
- **40 minute test**
- **Calculators are permitted**
- **Scratch paper permitted**
- **Can write on the test**
- **Answer sheet – capital letters only**
- **Problems are NOT in any specific order**



UIL Mathematics Contest



Contest Information and Rules

- **Scoring: +6 points for correct
-2 points for incorrect
0 points for skipped**
- **Grading and scoring rules are found in the UIL Constitution and Contest Rules (C&CR) manual.**



UIL Mathematics Contest

Problems on the Test

Basic Mathematics

Algebra 1

Geometry

Algebra 2

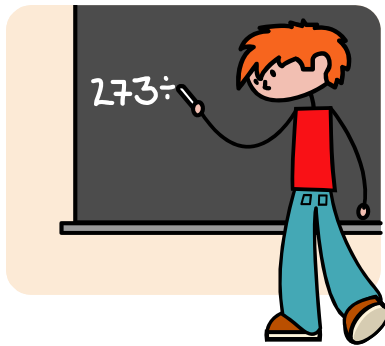
Trigonometry

Analysis

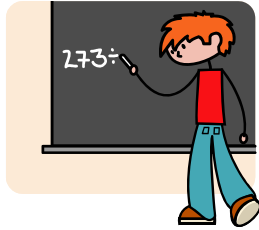
Basic Calculus

Probability

Misc. (my favorite section)



UIL Mathematics Contest



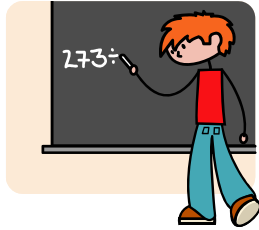
Approved Calculators

Contestants will be allowed the use of any commercially available silent hand-held calculators that do NOT require auxiliary electric power and as long as they are NOT modified. Each student may bring one spare calculator. Small, hand-held computers are NOT permitted.



Clearing the memory is NOT required.

UIL Mathematics Contest



Resources

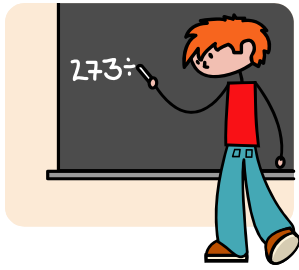
The best resource is a good mathematics program from grades K-12!

Books

**No Sense in Mathematics – by Don Skow
(dskow@panam.edu)**

**RAM Materials – by Leo Ramirez
(www.rammaterials.com)**





Texas Math & Science Coaches Association

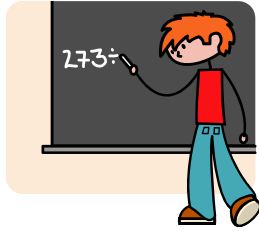
TMSCA

Contact: Julie Majewski-Smith
940-563-1005
execsectmsca@gmail.com

Newsletter - Resource Page - Tests - Forms



UIL Mathematics Contest



Resources

Websites

UIL - www.uiltexas.org

TMSCA - www.tmscaonline.net/index.html

Texas Competitive Mathematics –
www.texasmath.org

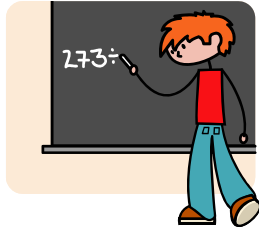
Math Magic - www.math-magic.com

Math Forum - www.mathforum.org

MATHNERDS - www.mathnerds.com



UIL Mathematics Contest



Practice & Test Taking Tips

SUCCESS

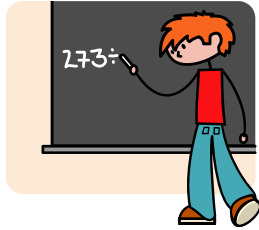
comes from

KNOWLEDGE

not timed test taking.



UIL Mathematics Contest



Practice & Test Taking Tips



Quick Hitters (QH)

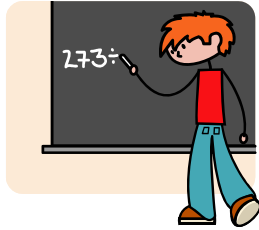
1. Evaluate: $(18 - 15)^3 \div 9 + 12 \times 6$

(A) 75 (B) 19 (C) 78 (D) 90 (E) 69

2. If $(4x - 3)^2 = ax^2 + bx + c$ then $a + b + c$ equals:

(A) 49 (B) 25 (C) 2 (D) 1 (E) -17

UIL Mathematics Contest

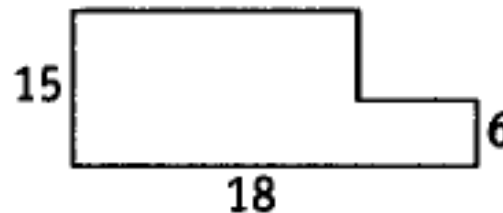


Practice & Test Taking Tips



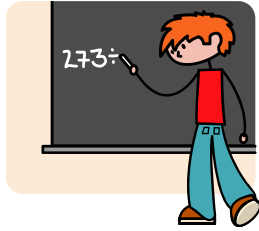
Quick Hitters (QH)

4. What is the perimeter of this hexagon?
All lengths are in cm.



- (A) 39 cm (B) 48 cm (C) 66 cm
(D) 78 cm (E) not enough data

UIL Mathematics Contest



Practice & Test Taking Tips



Do-Ables (DO)

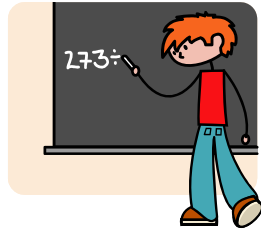
1. A car is traveling the 70 miles per hour on Interstate 10. At this rate, how many feet does the car travel in 1 second? (nearest foot)

(A) 10' (B) 103' (C) 130' (D) 420' (E) 700'

3. A circle has a radius of 4 inches. If the radius of the circle is increased 50% then the area of the larger circle is what percent of the area of the original circle?

(A) 125% (B) $166\frac{2}{3}\%$ (C) 200% (D) 225% (E) $233\frac{1}{3}\%$

UIL Mathematics Contest



Practice & Test Taking Tips



Number Sense

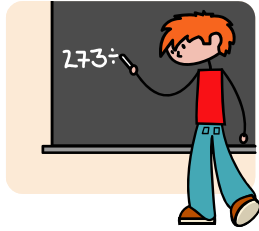
1. Let r and s be the roots of $2x^2 - 3x - 5 = 0$.
Find $r^2 + 2rs + s^2$.

(A) $6\frac{1}{4}$ (B) $2\frac{1}{4}$ (C) $\frac{3}{5}$ (D) $-1\frac{1}{2}$ (E) $-2\frac{1}{2}$

3. Write $0.1232323\dots$ as a proper fraction.

(A) $\frac{41}{333}$ (B) $\frac{61}{495}$ (C) $\frac{123}{990}$ (D) $\frac{41}{330}$ (E) $\frac{231}{333}$

UIL Mathematics Contest



Practice & Test Taking Tips



Calculators

1. Diamond Jim deposited some money in a savings account 30 months ago at a rate of 2.5% compounded monthly. His current balance is \$553.50. How much was his original deposit?

(A) \$539.84

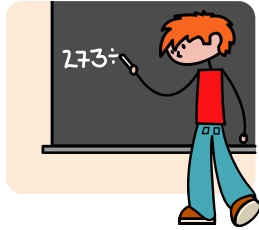
(B) \$520.00

(C) \$513.55

(D) \$479.70

(E) \$460.00

UIL Mathematics Contest



Practice Tips

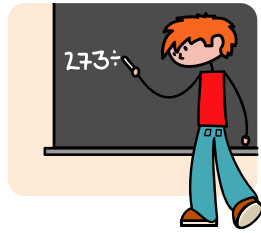
KNOWLEDGE

is the key to **SPEED**

WORKING PROBLEMS

leads to **SUCCESS**





**An apple a day is good for
your health.**

**A math problem a day is good for
your mind.**

**HAVE A
GREAT DAY!**

