

Practice and Test Taking Tips For Coaches

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http://www.uiltexas.org/academics/stem/mathematics

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

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 2018-2019 UIL Mathematics Handbook

Problems on the Test

Basic Mathematics

Algebra 1

Geometry

Algebra 2

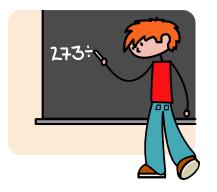
Trigonometry

Analysis

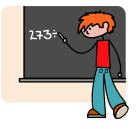
Basic Calculus

Probability

Misc. (my favorite section)



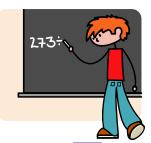




Approved Calculators

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

MEMORY IS NOT CLEARED.



Texas Math & Science Coaches Association

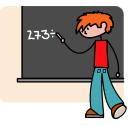
TMSCA - www.tmsca.org

Contact: Julie Majewski-Smith

940-563-1005

execsectmsca@gmail.com

Newsletter - Resource Page -Tests - Forms



Resources

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

Books

No Sense in Mathematics – by Don Skow (dps1221@hotmail.com)

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



Resources

Websites

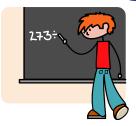
UIL - www.uiltexas.org

TMSCA - www.tmsca.org

Math Forum - www.mathforum.org

Virtual Challenge Meet – www.virtualchallengemeets.com





Resources

Practice Tests

University Interscholastic League (UIL) - www.uiltexas.org

Texas Math and Science Coaches Association (TMSCA) - www.tmsca.org

RAM Materials by Leo Ramirez - www.rammaterials.com

AMT Test Writing Service by Andy Zapata - adzapata74@gmail.com





Practice & Test Taking Tips

SUCCESS

comes from

KNOWLEDGE

not timed test taking.





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

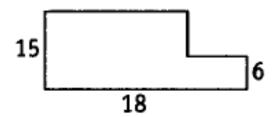


Practice & Test Taking Tips



Quick Hitters (QH)

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



- (A) 39 cm
- (D) 78 cm

(B) 48 cm

- (C) 66 cm
- (E) not enough data



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 $\frac{1}{3}$ %



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)
$$-1\frac{1}{2}$$

(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... as a proper fraction.

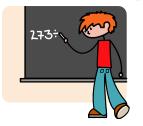
(A)
$$\frac{41}{333}$$

(B)
$$\frac{61}{495}$$

(C)
$$\frac{123}{990}$$

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

(E)
$$\frac{231}{333}$$



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?

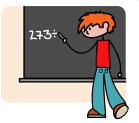
(A) \$539.84

(B) \$520.00

(C) \$513.55

(D) \$479.70

(E) \$460.00



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!

