2014
MATH SUPER BOWL

Sixth Grade
Individual Test

23. Abbey wants to build a cube with 4 *cm* sides using 1 *cm* cubes. How many cubes does she need?

    A. 64
    B. 12
    C. 24
    D. 48
    E. Not Given

24. A soft drink dispenser mixes 6 ml of cola syrup with 8 ml of soda water. How many ml of soda water does it mix with 120 ml of cola syrup?

    A. 90
    B. 160
    C. 1,600
    D. 180
    E. Not Given

25. $7\frac{1}{2} - 4\frac{3}{5} =$

    A. $2\frac{4}{5}$

    B. $3\frac{3}{5}$

    C. $2\frac{9}{10}$

    D. $3\frac{1}{2}$

    E. Not Given

Congratulations! You've completed Part I of the 2014 Math Superbowl! Quietly stay seated until the 25 minutes is up. <u>Do NOT</u> turn in your test until the 25 minutes is up. You are welcome to check your answers. Only answers on the scantron will be counted.

19. Ty took the escalator to the second floor. The escalator is 12 meters long, and he rode the escalator for 30 seconds. Which statements are true?

    A. He traveled 2 meters every 5 seconds.
    B. He traveled 2.5 meters per second.
    C. He traveled 0.4 meters per second.
    D. Every 25 seconds, he traveled 7 meters.
    E. Both A and C are correct.

20. Avocados are for sale 8 for $10. What is the cost for per avocado?

    A. $0.80
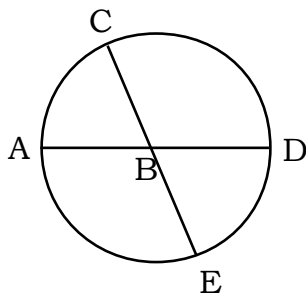   B. $1.25
    C. $1.33
    D. $1.00
    E. Not Given

21. What percent is equivalent to 7/8?

    A. 70%
    B. 87.5%
    C. 85%
    D. 90%
    E. Not given

22. What shape is the polygon with the following vertices?
(-5,-5) (-5,-8) (-8,-5) (-8,−8)

    A. rhombus
    B. square
    C. non-square rectangle
    D. triangle
    E. Not Given

16. In the circle below, ∠ CBD = 129°. B is the center of the circle. What is the measurement of ∠ ABC?

A. 78°

B. 129°

C. 51°

D. Can not be determined

E. Not Given

17. Complete the pattern.   4, 12, 21, 31, 42, ...

A. 54

B. 56

C. 64

D. 49

E. Not Given

18. Each of the 10 students in Mr. Waddell's class timed how long it took them to solve a puzzle. Their times (in minutes) are listed below:

Student	1	2	3	4	5	6	7	8	9	10
Time (minutes)	3	5	5	6	4	8	5	4	9	6

Based on the information above, which statement is true.

A. The mean, median, and mode are all equal.

B. The mean and mode are equal.

C. The mean and median are equal.

D. The mode and median are equal.

E. None of the statements are true.

13. Solve for n. $\frac{7}{8} = 2\frac{3}{4} + n$

   A. $-1\frac{7}{8}$

   B. $3\frac{5}{8}$

   C. $-1\frac{3}{4}$

   D. $-\frac{3}{4}$

   E. Not Given

14. On a map, the distance between Kansas City and St. Louis is 13.5 inches. The key on that map says that 1 inch = 19 miles. What is the actual distance between Kansas City and St. Louis? _____

   A. 265 miles
   B. 256.5 miles
   C. 250 miles
   D. 245.5 miles
   E. Not Given

15. Three angles of a quadrilateral measure 78 degrees, 125 degrees, and 99 degrees. What is the measure in degrees of the last angle?

   A. 45
   B. 99
   C. 90
   D. 58
   E. Not Given

10. A catering company charged an initial fee of $285.00 plus an extra charge of $65.00 per server. If the company earned $805.00 on one job, how many servers were hired?

    A. 5
    B. 6
    C. 7
    D. 8
    E. Not Given

11. Solve. $\quad 97 - 6(18 \div 3)$

    A. 61
    B. -79
    C. 41
    D. 25
    E. Not Given

12. Solve $\frac{1}{5} P - 12 = 20$.

    A. 40
    B. $\frac{32}{5}$
    C. 160
    D. 6.321
    E. Not Given

7. Divide. $\dfrac{46}{11} \div \dfrac{4}{7}$

A. $\dfrac{161}{22}$

B. $\dfrac{184}{77}$

C. $4\,\dfrac{6}{11}$

D. $6\,\dfrac{15}{22}$

E. Not Given

8. Find x if $x^4 = 16$.

A. 4
B. 5.333
C. 1.2
D. 2
E. Not Given

9. Solve. $(4^2 \times 2^3) - 5^3$

A. 81
B. 12
C. 28
D. 3
E. Not Given

4. Multiply. 0.049 x .003

    A. 0.147
    B. 0.0147
    C. 0.00147
    D. 0.000147
    E. Not Given

5. Subtract. 108.401 − 19.6849

    A. 88.7161
    B. 98.7161
    C. 88.6448
    D. 98.6448
    E. Not Given

6. Add. ⁻121 + 18 + 24

    A. 163
    B. -79
    C. -63
    D. 147
    E. Not Given

6th Grade Individual Test Part 1
2014
25 minutes – No Calculators
Answers must be recorded on the scantron to be counted.

1. The circumference of a circle measures 75.36 inches. What is the radius of the same circle? (π = 3.14)

    A. 24 in.
    B. 48 in.
    C. 12 in.
    D. 236.6304 in.
    E. Not Given

2. The area of a face on a cube measures 36 square centimeters. What is the volume of the same cube?

    A. 72 cubic cm.
    B. 729 cubic cm.
    C. 216 cubic cm.
    D. 108 square cm.
    E. Not Given

3. Estimate the answer by rounding to the nearest hundreds place and then multiply.

    4,451 x 2,981 =

    A. 13,305,000
    B. 12,000,000
    C. 12,276,000
    D. 13,500,000
    E. Not Given