

## 2018 TAME Middle School Practice Mathematics Test

- (1)  $245 + 375 =$   
A) 610                      B) 620                      C) 510                      D) 520
- (2)  $402 - 157 =$   
A) 245                      B) 345                      C) 255                      D) 155
- (3)  $0.25 \times 284 =$   
A) 74                      B) 174                      C) 71                      D) 710
- (4)  $4\frac{1}{8} - 1\frac{1}{2} =$   
A)  $2\frac{1}{4}$                       B)  $1\frac{5}{8}$                       C)  $3\frac{3}{8}$                       D) None of these
- (5)  $12 - 8 \div 2 =$   
A) 2                      B) 8                      C) 6                      D) 16
- (6) One square foot equals \_\_\_\_\_ square inches.  
A) 12                      B) 144                      C) 24                      D) 72
- (7)  $2 + 4 + 6 + \dots + 38 =$   
A) 400                      B) 380                      C) 190                      D) 145
- (8)  $21 \times 143 + 35 \times 143 =$   
A) 3,003                      B) 5,005                      C) 8,008                      D) 13,013

**For problems 9 – 12 use the table below to answer the questions.**

Time	Temperature °C
6:00 AM	18
8:00 AM	18
10:00 AM	20
12:00 PM	22
2:00 PM	27

- (9) What is the mean temperature for the data provided in the above table?  
A)  $20.5^\circ$                       B)  $18^\circ$                       C)  $105^\circ$                       D)  $21^\circ$
- (10) What is the median temperature for the data provided in the above table?  
A)  $20.5^\circ$                       B)  $18^\circ$                       C)  $105^\circ$                       D)  $20^\circ$
- (11) What is the range of temperatures for the data provided in the above table?  
A)  $9^\circ$                       B)  $18^\circ$                       C)  $11^\circ$                       D)  $36^\circ$
- (12) Based on the above table, at what time of day would you expect the temperature to be around  $26^\circ\text{C}$ ?  
A) 11:00 AM                      B) 12:30 PM                      C) 1:45 PM                      D) 9:00 AM

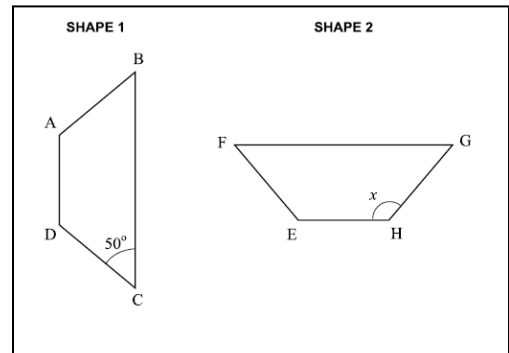
- (13) Which of the following is not considered to be rational number?  
 A) .1333...                      B)  $\pi$                       C)  $3.5 \times 10^2$                       D)  $-4.25$
- (14)  $43026 \div 101 =$   
 A) 426                      B) 246                      C) 4206                      D) 4260
- (15) If the area of a circle is  $36\pi$ , then its circumference is  $k\pi$  and k equals  
 A) 6                      B) 3                      C) 12                      D) 24
- (16) If batteries cost \$4.99 per packages of four, how many batteries can be bought for \$20 neglecting sales tax?  
 A) 40                      B) 30                      C) 20                      D) 16
- (17) What is the probability of getting a sum of 8 when rolling two dice?  
 A)  $\frac{1}{3}$                       B)  $\frac{1}{9}$                       C)  $\frac{5}{18}$                       D)  $\frac{5}{36}$
- (18)  $206 \times 20 =$   
 A) 40,210                      B) 4,210                      C) 41,102                      D) 4,120
- (19)  $4\frac{1}{4} \times 4\frac{1}{4} =$   
 A)  $18\frac{1}{16}$                       B)  $20\frac{1}{16}$                       C)  $16\frac{1}{8}$                       D)  $16\frac{1}{16}$
- (20) 25 days = \_\_\_\_\_ hours.  
 A) 576 hours                      B) 600 hours                      C) 480 hours                      D) 660 hours
- (21) There are 254 counties in Texas. What is the largest prime factor of 254?  
 A) 127                      B) 11                      C) 13                      D) 2
- (22)  $6 \times 5 \times 4 \times 3 \times 2 \times 1 =$   
 A) 360                      B) 240                      C) 900                      D) 720
- (23)  $12\frac{1}{3} \div \frac{1}{6} =$   
 A) 74                      B)  $2\frac{1}{6}$                       C)  $2\frac{1}{3}$                       D) 72
- (24) The cost of the takeout food is \$13.33. Emilio had 11 quarters, 15 dimes, 9 nickels, 4 pennies, a \$5 bill and three \$1's. How much was he short?  
 A) \$1.74                      B) 74¢                      C) 11¢                      D) 59¢
- (25) In June, the temperatures for one week were 97°F, 98°F, 100°F, 97°F, 97°F, 99°F and 100°F. What is the mode of these temperature for that week?  
 A) 100°F                      B) 97°F                      C) 98°F                      D)  $98\frac{2}{7}$  °F





- (47) The equation  $x^2 - 5x = 24$  has two roots (solutions). Which root has the larger value?  
 A) 12                                      B) 4                                      C) 8                                      D) -3
- (48) Billy is 20 days older than Sue and Sue is 34 days younger than Dan. If Dan's birthday is December 30<sup>th</sup>, what is the date of Billy's birthday?  
 A) December 17                      B) February 22                      C) February 20                      D) January 13
- (49)  $4\frac{1}{2}\%$  of 24 is 9% of what number?  
 A) 12                                      B) 18                                      C) 36                                      D) 48
- (50)  $13 \times \frac{13}{15} =$   
 A)  $12\frac{2}{15}$                                       B)  $11\frac{4}{15}$                                       C)  $12\frac{4}{15}$                                       D)  $13\frac{1}{15}$

- (51) In the figures to right trapezoid  $ABCD \cong$  trapezoid  $EFGH$ , and they're both isosceles trapezoids. If the measure of  $\angle C$  in shape #1 is  $50^\circ$ , what is the measure of  $\angle x^\circ$  in shape #2?



- A)  $50^\circ$   
 B)  $65^\circ$   
 C)  $130^\circ$   
 D)  $260^\circ$

- (52) Mr. Garcia constructed the stem-and-leaf plot to the right with the scores from a recent geometry test. Find the median score for this geometry test.

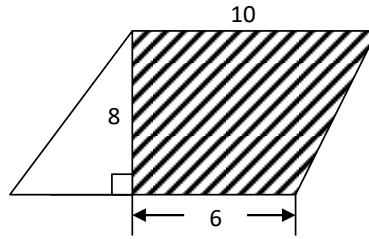
Geometry Scores				
6	2	4	7	8
7	0	3	7	9
8	1	5		
9	0	1	2	

- A) 73  
 B) 74  
 C) 76  
 D) 77

- (53)  $0.416666\dots - 0.083333\dots =$   
 A)  $\frac{5}{6}$                                       B)  $\frac{1}{3}$                                       C)  $\frac{2}{5}$                                       D)  $\frac{1}{2}$
- (54) If the value of 10 dimes and 20 quarters equals the value of 10 quarters and  $q$  dimes, then  $q$  equals  
 A) 45                                      B) 35                                      C) 30                                      D) 20
- (55) In how many ways can 18 be written as the sum of two primes?  
 A) 0                                      B) 1                                      C) 2                                      D) 3

- (56) What is the area of the shaded part of the figure to the right?

- A) 24  
 B) 48  
 C) 60  
 D) 64

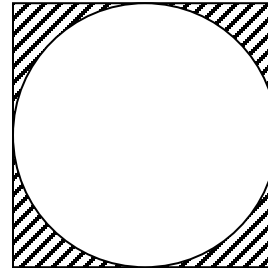


- (57) If the first triangular term is equal to 1, the 2<sup>nd</sup> triangular term is equal to 3, the 3<sup>rd</sup> triangular term is equal to 6 and so on, then the sum of any two consecutive triangular terms is always equal to

- A) the product of the two terms.  
 B) twice the sum of the two triangular terms.  
 C) the square of the difference of the two triangular terms.  
 D) the square of the larger triangular term.

- (58) In the figure to the right, if the area of the inscribed circle is  $16\pi$ , what is the shaded area in square units?

- A) 64  
 B)  $32 - 16\pi$   
 C)  $32 + 16\pi$   
 D)  $64 - 16\pi$

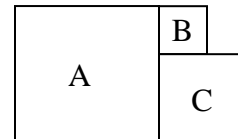


- (59) The arithmetic mean of four numbers is 24. If the largest of these numbers is 48, then the mean of the three remaining numbers is

- A) 16                                      B) 15                                      C) 14                                      D) 13

- (60) In the figure to the right A, B, and C are squares. If the perimeter of B is 12 and the perimeter of C is 24, what is the perimeter of A?

- A) 81  
 B) 72  
 C) 36  
 D) 18



# 2018 TAME Middle School Practice Mathematics Test Answer Key

- |                          |        |        |
|--------------------------|--------|--------|
| (1) B                    | (21) A | (41) A |
| (2) A                    | (22) D | (42) D |
| (3) C                    | (23) A | (43) D |
| (4) D ( $2\frac{5}{8}$ ) | (24) D | (44) C |
| (5) B                    | (25) B | (45) A |
| (6) B                    | (26) B | (46) D |
| (7) B                    | (27) C | (47) C |
| (8) C                    | (28) D | (48) D |
| (9) D                    | (29) B | (49) A |
| (10) D                   | (30) A | (50) B |
| (11) A                   | (31) C | (51) C |
| (12) C                   | (32) D | (52) D |
| (13) B                   | (33) B | (53) B |
| (14) A                   | (34) A | (54) B |
| (15) C                   | (35) D | (55) C |
| (16) D                   | (36) C | (56) D |
| (17) D                   | (37) A | (57) C |
| (18) D                   | (38) C | (58) D |
| (19) A                   | (39) B | (59) A |
| (20) B                   | (40) A | (60) C |