

- (1) What is  $543514 + 866520 - 646387$ ?  
A) 1467515   B) 763647   C) 1943   D) -179516   E) -43623
- (2) 65% of 35 is 30% of \_\_\_\_  
A) 1180   B) 6   C) 75   D) 176   E) 1416
- (3) What is  $446005 + 77041 - 571773$ ?  
A) -48727   B) 814662   C) 833499   D) -121471   E) -327727
- (4) If the edge of the cube is 8 units, what is the volume of the cube?  
A) 729   B) 512   C) 512   D) 1000   E) 216
- (5) What is the sum of the first 61 terms of the sequence  $8 + 16 + 24 + \dots$ ?  
A) 15128   B) 2016   C) 12320   D) 8580   E) 8575
- (6) What is one of the x-intercepts of  $0x^2 + 0x + 0$ ?  
A)  $-1/2$    B) -6   C) -1   D)  $-4/3$    E)  $-1/2$
- (7) What is  $11(\text{base } 2) + 11(\text{base } 2)$  in base 2?  
A) 120   B) 100   C) 144   D) 1-10   E) 100
- (8) Long bought a phone that was on sale for 8% off the original price. If the original price of the phone was \$280.00, how much did he save?  
A) 22.40   B) 323.40   C) 92.40   D) 172.80   E) 126.00
- (9) How many centiliters of water must be added to 90 centiliters of a 70% salt solution in order to produce a 20% salt solution?  
A) 77   B) 140   C) 225   D) 20   E) 49
- (10) How many minutes are between 8:03AM and 8:14AM?  
A) 745   B) 35   C) 11   D) 1165   E) 1152
- (11) What is  $552944 + 498594 - 968452$ ?

A) 120227   B) 829385   C) 675493   D) 83086   E) 1758565

(12) What is  $82(\text{base } 9) + 73(\text{base } 9)$  in base 9?

A) 052   B) 133   C) 165   D) 102   E) 140

(13) What is one of the x-intercepts of  $6x^2 - 30x + 36$

A) 0   B)  $-1/2$    C) -1   D)  $-3/2$    E) 3

(14) What is  $2409 + 42575 - 673512$ ?

A) -206714   B) 521240   C) -121199   D) 842759   E) -628528

(15) How many minutes are between 7:09PM and 9:08PM?

A) 99   B) 91   C) 119   D) 431   E) 0

(16) What is one of the x-intercepts of  $-3x^2 + 0x + 3$

A) 1   B)  $-2/3$    C)  $-5/6$    D)  $-5/3$    E) 0

(17) What is the sum of the first 72 terms of the sequence  $5 + 10 + 15 + \dots$ ?

A) 2975   B) 13140   C) 6806   D) 4410   E) 264

(18) How many minutes are between 1:55PM and 10:00PM?

A) 114   B) 719   C) 485   D) 609   E) 537

(19) Which is an equation for the line passing through the point  $(-5, -5)$  and having a slope of 1?

A)  $y = 3x + 5$    B)  $y = 1x + 10$    C)  $y = 1x + 3$    D)  $y = 3x - 8$    E)  $y = 0x - 10$

(20) What is  $894847 + 192750 - 595920$ ?

A) -20366   B) 851429   C) 491677   D) 612020   E) -707177

# Math UIL Answer Key

1. B

2. C

3. A

4. B

5. A

6. D

7. B

8. A

9. C

10. C

11. D

12. C

13. E

14. E

15. C

16. A

17. B

18. C

19. B

20. C