NAME:_____

P.I. A.N.8: Determine the number of possible arrangements (permutations) of a list of items

1. How many different arrangements can be made with the letters in the word CRAYON?

   [A] 30 [B] 15 [C] 720 [D] 156

2. How many different arrangements can be made with the letters in the word GAME?

   [A] 24 [B] 4 [C] 16 [D] 6

3. How many distinct arrangements can be made with the letters in the word ALUMINUM?

   [A] 12,520 [B] 5040

   [C] 10,080 [D] 208

4. How many different arrangements can be made with the letters in the word IOWA?

   [A] 4 [B] 104 [C] 24 [D] 6

5. How many different arrangements can be made with the letters in the word MOVIE?

   [A] 100 [B] 120 [C] 130 [D] 20

6. How many distinct arrangements can be made with the letters in the word TALLAHASSEE?

   [A] 286 [B] 1,663,200

   [C] 831,600 [D] 834,040

7. How many distinct arrangements can be made with the letters in the word SATELLITE?

   [A] 22,680 [B] 47,800

   [C] 45,360 [D] 234

8. How many distinct arrangements can be made with the letters in the word SURPRISING?

   [A] 260 [B] 453,600

   [C] 907,200 [D] 451,160

9. How many different arrangements can be made with the letters in the word TOPIC?

   [A] 130 [B] 100 [C] 120 [D] 5

10. How many different arrangements can be made with the letters in the word GRAPHICS?

    [A] 40,320 [B] 8 [C] 64 [D] 784

NAME:_____

11. How many different arrangements can be made with the letters in the word ZEBRA?

[A] 130 [B] 20 [C] 120 [D] 10

12. How many distinct arrangements can be made with the letters in the word BOOKKEEPER?

[A] 302,400 [B] 148,760

[C] 151,200 [D] 260

13. How many distinct arrangements can be made with the letters in the word COMMITTEE?

[A] 45,360 [B] 22,680

[C] 47,800 [D] 234

14. How many different arrangements can be made with the letters in the word GAME?

[A] 104 [B] 12 [C] 36 [D] 24

15. How many distinct arrangements can be made with the letters in the word MISSISSIPPI?

[A] 69,300 [B] 34,650

[C] 286 [D] 32,210

16. How many different arrangements can be made with the letters in the word IOWA?

[A] 12 [B] 24 [C] 36 [D] 104

17. How many different arrangements can be made with the letters in the word POWER?

[A] 120 [B] 5 [C] 25 [D] 10

18. How many different arrangements can be made with the letters in the word MATH?

[A] 16 [B] 36 [C] 4 [D] 24

19. How many distinct arrangements can be made with the letters in the word CINCINNATI?

[A] 260 [B] 47,960

[C] 50,400 [D] 25,200

20. How many different arrangements can be made with the letters in the word ORANGE?

[A] 720 [B] 15 [C] 30 [D] 36

[1] C

[2] A

[3] C

[4] C

[5] B

[6] C

[7] C

[8] B

[9] C

[10] A

[11] C

[12] C

[13] A

[14] D

[15] B

[16] B

[17] A

[18] D

[19] C

[20] A