**P5 MATHEMATICS MARKING SCHEME, 2019**

**ANSWER ALL QUESTIONS (100MARKS)**

1.Write the following number in words : 671 379 :**Six hundred seventy one thousand ,three hundred seventy seven** (**2marks)**

2. Write the following in figures:

Nine hundred seven thousand one hundred and seven.: **907 107…………………………………** (**2marks)**

3. a) What is the place value of digit 3 in the number 235 176………. **3 is ten thousands (1mark)**

 b) What is the place value of 4 in the number 321 456 : …… …. **4 is hundreds** (**1mark**)

4. Write the following number in expanded form 776 707 : …………….**700 000 +70000 +6000+700+6** (**1mark)**

5. Compare the following numbers using <, > or = (**3marks)**

 

**a)<**

**b)>**

**c)=**

6) If one Shirt costs 10 000F . Calculate the cost of 5 shirts ? **(2marks)**

**The cost of 5 shirts = 10000FX5=50 000F**

7). Workout: a) 272 142 + 203 512 + 402 123 = **877 777** **(1mark)**

 (b) 874 450 – 583 750 = **290 700** **(1mark )**

 (c) 648 × 212 = **137376**  **(2marks)**

 (d) 581 × 611 = **354 991** **(1mark)**

 e) 858 ÷ 22 = **39**  **(2marks)**

 f) (+3) + (–4) **=-1** **(1mark)**

 **g) (–3) + (–4) = -7** **(1mark)**

 8. (a) Test if 1 824 is divisible by 3? (**2marks)**

 **Add the digits for the number 1 824. 1 + 8 + 2 + 4 = 15.**

 **Now, 15 ÷ 3 = 5. So 15 is divisible by 3. Therefore, 1 824 is divisible by 3.**

 (b) Test if 56 480 is divisible by 5 (**2marks)**

**A number is divisible by 5 if its last digit is 0 or 5. Therefore 56 480 is divisible by 5 because the last digit is 0**

9) Arrange the following integer by descending order +1, +3, –10, –2, –4, 0 (**1mark)**

**By descending order we get : +3;+1;0;-2;-4;-10**

10) Arrange these integers by ascending order –8, –5, +2, +5, +6, +1 (**1mark)**

**By ascending order we get :-8;-5;+1; +2;+5;+6**

11) Prime factorize 60. And show the prime factors using indices.

 **(2marks)**

|  |  |
| --- | --- |
| **60** | **2** |
| **30** | **2** |
| **15** | **3** |
| **5** | **5** |
| **1** |  |

**60=22x3x5**

12)Write an equivalent fraction of  **(1mark)**



13) How many hours are in 5 days? **(1mark)**

**24hx5=120hours**

14) Find the Greatest Common Factor (GCF) of 28, 42 and 56 (**2marks)**.

|  |  |  |
| --- | --- | --- |
| **Prime factors**  | **Numbers**  |  |
| **2** | **28** | **42** | **56** |
| **7** | **14** | **21** | **28** |
|  | **2** | **3** | **4** |

**28=2x2x7**

**42=2x3x7**

**56=2x2x2x7**

. **So, GCF is 2 × 7 = 14. Therefore GCF is 2 × 7 = 14. We use common factors with lowest indices.**

15**) Write  as an improper fraction (1mark)**

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16) What is the Lowest Common Multiple of 6, 12 and 18? **(2marks)**

|  |  |  |  |
| --- | --- | --- | --- |
| 6 | 12 | 18 | 2 |
| **3** | **6** | **9** | **2** |
| **3** | **3** | **9** | **3** |
| 1 | 1 | 3 | 3 |
| 1 | 1 | 1 |  |
|  |  |  |  |

the Lowest Common Multiple of 6, 12 and 18 is **3x3x2x2=36**

17) Workout the following **(4marks)**

 a) 



 b)  

 c)  ; 

 d)  ; 

18. Three children had nine sweets.

(a) What is the ratio of child to sweets? : 3:9 (**2marks)**

(b) How many sweets are needed for 4 children? (**2marks)**

**a) Ratio = number of children /number of sweets = 3 children /9 sweets = 1 child to 3 sweets or 1 : 3**

**(b) 1 child gets 3 sweets. 4 children get 3 × 4 sweets = 12 sweets**

**19. Workout 9 h 15 min – 5 h 45 min =3h30** (**2marks)**

|  |  |  |
| --- | --- | --- |
|  8 | 60mn |  |
|  9 | 1 | 5 |
| -5 | 4 | 5 |
| **3** | **3** | **0** |

20). A mathematics test started 8:00 a.m and ended 12:00 noon. How many hours did the test take (**2marks)**

 **I took 12h 00-8h00=4hours**

21. Workout

 **(a)  (3marks)**

 ****

(b) Write  as a decimal fraction (**1mark)**

 

22.Workout : **(4marks)**

**(a) 4 hl – 20 dal = \_20dal =200 litres**

**(b) 2 dam 3 m × 5 = 11dam5m=\_\_\_1 .15hm**

 **(c) 300km – 4 0000 m =300 000 m-40 000m=.260 000m=260000....dam**

 **d)400 ha +20 000m2 = 4 000 000 m 2 +20 000m 2 = 4 020 000 m 2**

23) Kwizera earns a salary of 150 000 Frw in a month. He spends his money as follows:

|  |  |
| --- | --- |
| **Items**  | **Costs**  |
| Food | 30 000 Frw |
| School fees | 50 000Frw |
| Transport: | 1 000Frw |
| Water and electricity | 25 000 Frw |
| Total  | **106 000** |

He saves the remaining money.

1. How much does he spend in total each month? **106 000F** ( **2marks)**
2. How much does he save each month? **He saved 150 000F-106 000F= 44 000F** (**2marks)**
3. Why do you think it is important for Kwizera to save? Saving is good to him for the better future, to do such project,…. **2marks**

24) Find next two terms in the sequence 

 **(2marks)**

 

25) A man’s stride is 10 dm long. He walks a distance of 10 dam. How many strides does he take to cover the distance?

 **He will use ** (**3marks)**

26) A shopkeeper had 112 bottles of juice. He sold each of them at 350 Frw. How much money did he get?

 (**3marks)**

 He will get **350Fx112=39200F**

27) (a) Find the circumference of a circle garden whose radius is 7m. (Take) (**3marks)**

 **Circumference of a circle = ; ;;**

28) A rectangular tank measures 4.3 m long, 2.4 m wide and 1.5 m high. Calculate the volume of the tank. Justify your answer.

 **Its volume is 4.3mx2.4mx1.5m=15.48m3** (**3marks)**

29) Munezero had  litres of milk for his baby. During the day, the baby drank some of the milk. The milk that remained was  litres . How much milk did the baby **drank ; the baby drank litres**  (**3marks)**

30) The length of a rectangular piece of land is 48 m by 12 m. Poles were fixed at intervals of 2 m to fence it.

(a) What is the distance round the land? (**2marks)**

 (b) How many poles were used to fence the land? (**2marks)**

**a) The perimeter of the land is (48m+12m)x2 =60mx2=120m**

(**a) Distance round the land = perimeter = 48 m + 12 m + 48 m + 12 m or (42m+12m)x2 = 120 m**

 **(b) Number of poles = Distance round or perimeter/ Interval length = 120 m :2 m = 60 poles**

 **Therefore the number of poles = 120:2=60poles**

31) Calculate the size of angles a and b in the following **(4marks)**

**i) angle b=angle a 1200**





 **ii) angle a=180degr-110degr=70degr**

 32) Study the chart below: **7marks**

 **Figure shows results obtained by 5 pupils in a SST Test**

 a) What is the bar chart about? **Figure shows results obtained by 5 pupils in a SST Test**

 (b) How many pupils did the SST Test ?: **5pupils did the test**

 (c) What is the highest score? **16**

 (d) Who scored the lowest mark? **MIMI**

 (f) Who scored the highest mark? **JOJO**

 (g) How many more marks did Julius score than Monica ?**15-8=7**

 (h) What score did Jojo get? **16**

33) Convert 20.000FRW into **(6marks)**

**a) US dollars (USD) : 20.000FRW: 800F/1USD=25USD**

**b)Euros (EUR): 20.000frw: 900F/1EUR=22.22EUROS**

**C)Kenya Shillings (Ksh) : 20.000frw:8,00F/1KSH =2500ksh**

**Using the Exchange rate indicated below**

|  |  |
| --- | --- |
| 1USD | 800F |
| 1EUR | 900F |
| 1Ksh | 8,00F |