COMPETENCE BASED CURRICULUM

JUNIOR SCHOOL

FORMATIVE ASSESSMENT

TERM ONE 2024

GRADE 8

 MARKING SCHEME

 **MATHEMATICS**

1. Twenty seven million, seven hundred and seven thousand, eight hundred and seven. $√$

 2. L.C.M of 27, 30 and 45=270$\sqrt{}$

n=270+3$√$

n=273$\sqrt{}$

3 .a) =-7

 b) =+9

 c) = -7

4. =2(-6) – 3(-2) +4=-2 substitution 1mk

 A1

5.$=\frac{2}{5}of\left\{\frac{32}{5}-1×\frac{1}{5}\right\}√$

 = $\frac{2}{5}of\left\{\frac{31}{5}\right\}√$

 =$\frac{62}{25}$

 =$2\frac{12}{25}\sqrt{}$

6. 38, 97 oranges each

79, 176 oranges each

Rest 165- (38+79)=48

Total oranges =(38$×97)+\left(79×176\right)+(48×59$

 =20422 oranges

7. $\frac{x+1}{2}-\frac{x-1}{3}$=$\frac{3\left(x+1\right)-2(x-1)}{6}√$

 =$\frac{3x+3-2x+2}{6}√$

 =$\frac{x+5}{6}√$

8. r=1.050505$√$

10r=10.50505

100r=105.0505

100r-r=105.0505-1.0505

99r=104

r=$\frac{104}{\begin{array}{c}99\\\end{array}}√$

r=1$\frac{5}{99}$

a=5, b=99$√$

9. 24-(-3) =24+3$√$

=27$℃√$

10.a) 24.701 add 30 = 24.731

b)0.146=14.6$×10^{\begin{array}{c}-2\\\end{array}}$

 square root =3.821$×10^{-1}$

 =0.3821

11.a, p=$\frac{2}{3}a√$

a-$ \frac{2}{3}a=10√$

3a-2a=30

a=30, p=20$√$

12.7544 is divisible by 2 since the last digit is an even number.

7+5+4+4=20

7544 is not divisible by 3 since the sum of its digits is not divisible by 3

7544 is not divisible by 6

13. a) 0.00121 =1.21$×10^{-3}$

 b)4521.021=4.521021$×10^{3}$

14 .$\frac{0.17×1.05+0.32}{4.5×0.08-0.089}$

Numerator= 0.17$×1.05+0.32$

 =0.1785+0.32

 =0.4985 $√$

Denominator =4.5$×0.08-0.089$

 =0.36-0.089

 =0.271$√$ BODMAS M1

 $\frac{0.4985}{0.271}=1.839√$

15. 1764= 2$×882$

 =2$×2×441$ M1

 =2$×2×3×147$

 =2$×2×3×3×49$

 =2$×2×3×3×7×7$

=$2^{2}×3^{2}×7^{2}$ M1

$\sqrt{1764}=2×3×7=4$2 A1

16.2b+a$\left[3-2(a-5)\right]$

=2b+a(a-2a+10)$√$

=2b+a(-a+10)$√$

=2b-$a^{2}$+10a

=-$a^{2}+10a+2b√$

17. L.C.M of 6,5 and 8= 120 minutes.$√$

120/60= 2hrs $√$

9.15-2=7.15$√$

=7.15 a.m$√$

ii)2$×2=4hrs√$

 9.15am

+4.00

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13 15 hours

iii) 1315

 +2.00

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 15 15 hours

 +2.00

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17 15 hours

THE END