# COMPETENCE BASED CURRICULUM

# JUNIOR SCHOOL

# FORMATIVE ASSESSMENT

# TERM ONE 2024

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√

    n=270+3√
    n=273√

3 .a) =-7

  b) =+9

  c) = -7

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

               A1

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

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

  $= \frac{62}{25}$

  $= 2\frac{12}{25}$ √

6. 38, 97 oranges each

79, 176 oranges each

Rest 165- (38+79)=48

Total oranges $=(38\times 97) + (79 \times 176) + (48 \times 59$

$\qquad$ =20422 oranges

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

$\qquad = \dfrac{3x+3-2x+2}{6}$ √

$\qquad = \dfrac{x+5}{6}$ √

8. r=1.050505√

10r=10.50505

100r=105.0505

100r-r=105.0505-1.0505

99r=104

r=$\dfrac{104}{99}$ √

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

a=5,  b=99√

9.  24-(-3) =24+3√

=27°C√

10.a) 24.701 add 30 = 24.731

b)0.146=14.6$\times 10^{-2}$

  square root  =3.821$\times 10^{-1}$

$\qquad$ =0.3821

11.a, $p = \frac{2}{3}a\sqrt{}$

$a - \frac{2}{3}a = 10\sqrt{}$

3a-2a=30

a=30,  p=20$\sqrt{}$

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 $= 1.21 \times 10^{-3}$

b)4521.021$=4.521021 \times 10^{3}$

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

Numerator$= 0.17 \times 1.05 + 0.32$

=0.1785+0.32

=0.4985 $\sqrt{}$

Denominator $=4.5 \times 0.08 - 0.089$

=0.36-0.089

=0.271$\sqrt{}$        BODMAS  M1

$\frac{0.4985}{0.271} = 1.839\sqrt{}$

15. 1764$= 2 \times 882$

$= 2 \times 2 \times 441$    M1

$=2 \times 2 \times 3 \times 147$

$=2 \times 2 \times 3 \times 3 \times 49$

$=2 \times 2 \times 3 \times 3 \times 7 \times 7$

$=2^2 \times 3^2 \times 7^2$        M1

$\sqrt{1764} = 2 \times 3 \times 7 = 42$        A1

16. $2b+a[3 - 2(a - 5)]$

$=2b+a(a-2a+10)\sqrt{}$

$=2b+a(-a+10)\sqrt{}$

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

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

17. L.C.M of 6,5 and 8= 120 minutes.$\sqrt{}$

120/60= 2hrs $\sqrt{}$

9.15-2=7.15$\sqrt{}$

=7.15  a.m$\sqrt{}$

ii)$2 \times 2 = 4hrs\sqrt{}$

  9.15am
+4.00
_____
13 15 hours
iii)  1315
   +2.00
_____
  15 15 hours
  +2.00
_____
17 15 hours
THE END