Name : _____   Grade : _____

Subject: _____   Teacher : _____

Mid-Term EXAM – Even SEMESTER
MATHS
ACADEMIC YEAR 2023/2024
March, 2024

I. **Cross (X) the correct option, A, B, C or D.**

1. What is the simplest form of $\frac{15}{21}$?

    A. $\frac{5}{7}$ B. $\frac{10}{14}$ C. $\frac{3}{6}$ D. $\frac{7}{9}$

2. What is the lowest term of $\frac{60}{144}$?

    A. $\frac{10}{14}$ B. $\frac{5}{12}$ C. $\frac{6}{14}$ D. $\frac{20}{30}$

3. Work out this addition. Find the answer in its simplest form and as a mixed number when appropriate. $\frac{5}{9} + \frac{13}{27}$

    A. $\frac{28}{27}$ B. $1\frac{1}{27}$ C. $\frac{8}{27}$ D. $1\frac{2}{9}$

4. Work out this subtraction. Find the answer in its simplest form and as a mixed number when appropriate. $\frac{9}{13} - \frac{1}{2}$

    A. $\frac{5}{26}$ B. $\frac{1}{25}$ C. $\frac{1}{26}$ D. $\frac{3}{13}$

5. Copy and complete this. $4\frac{1}{3} + 5\frac{6}{7}$

    A. $2\frac{3}{21}$ B. $\frac{7}{21}$ C. $9\frac{2}{21}$ D. $10\frac{4}{21}$

    Work out these multiplications. Find out the correct answers - *each answer in its simplest form and as a mixed number when appropriate*.

6. $\frac{3}{7} \times 77$

    A. 7   B. 11   C. 22   D. 33

7. $\frac{5}{6} \times \frac{9}{11}$

    A. $\frac{5}{17}$ B. $\frac{3}{7}$ C. $\frac{15}{22}$ D. $\frac{45}{66}$

8. 30% of a sum of money is $234. Use this fact to work out 60% of the same amount.

    A. 780$ B. 468$ C. 300$ D. 250$

9. 63% of 648=408.24. Use this fact to find out 21% of $648.
   A. $40.8   B. $136   C. $136.08   D. $140

10. 32% of 1600 = 512. Use this fact to work out 64% of 1600.
    A. 256   B. 1024   C. 300   D.1000

II.   Write **T** if the statement is **True** and **F** if it is **False.**

11. There are 4600 people in a stadium. 58% are males. How many is that?
    Answer: 2668.   (   )

12. In school A, 85 students took a mathematics exam and 59 passed.
    In school B, 237 students took a mathematics exam and 147 passed.
    Which school had a better pass rate?
    Answer: school B   (   )

13. A man earns $45 000 in a year. He can earn $16 000 without paying any tax.
    He pays 24% tax on anything above $16 000. Work out how much tax he pays.
    Answer: $7000   (   )

14. I eat $\frac{1}{4}$ of a pizza. My brother eats $\frac{2}{3}$ of what is left. What fraction of the pizza
    does my brother eat?
    Answer: $\frac{1}{3}$ (   )

15. $\frac{4}{7} + \frac{3}{4} = 1\frac{9}{28}$ (   )

16. $\frac{3}{4}$ x 26 = $18\frac{1}{2}$ (   )

17. $18 : \frac{2}{3} = 27$ (   )

18. $\frac{4}{5} : \frac{6}{25} = 3\frac{1}{3}$ (   )

19. $\frac{12}{18} - \frac{3}{9} = \frac{3}{18}$ (   )

20. $3\frac{3}{25} + 2\frac{5}{15} = \frac{3}{5}$ (   )

III.   **Work out these following problems.**

21. In a packet of biscuits, $\frac{2}{5}$ are chocolate, $\frac{1}{6}$ are shortbread, and the rest are coconut. What
fraction of the biscuits in the packet are coconut ?

22. In a cinema, $\frac{3}{5}$ of the people watching the film are children. $\frac{3}{4}$ of the children are girls.
a. What fraction of the people watching the film are girls?
b. What fraction of the people watching the film are boys?

23. A trader bought 12 shirts for $150 altogether. He sold 11 of them for $20 each and one for $10. Work out his overall percentage profit or loss.

24. This year Justin earned $52 700.
He must pay 28% tax on everything he earns over $12 800.
a. Work out how much tax he has to pay.
b. Work out the percentage of his income that he pays in tax.

25. One year, in school A, 162 students leave and 109 go to university. In school B, 75 students leave and 68 go to university. Compare the percentages of students going to university from each school.