1. Simplify $\dfrac{4\frac{1}{2} + \frac{2}{3}}{\frac{8}{13} \times 4\frac{1}{3}}$.

2. Arrange $\dfrac{11}{12}$, $\dfrac{5}{8}$, $\dfrac{4}{15}$ in ascending order.

3. Evaluate $[(1\frac{5}{7} - 4\frac{2}{3}) \div 4\frac{3}{7}] - 8$.

4. Find the average of $\dfrac{3}{8}$, $\dfrac{1}{4}$ and $\dfrac{2}{5}$.

5. Express $\dfrac{7 - 1\frac{2}{3}}{2 + 1\frac{5}{9}}$ as a single fraction in its lowest terms.

6. Evaluate the following, giving your answers in their simplest form:

   (a) $\dfrac{1}{2} + \dfrac{1}{4} + \dfrac{1}{8}$

   (b) $2 \times \dfrac{22}{7} \times \dfrac{21}{4}$

   (c) $\left(2\frac{1}{4} + 3\frac{1}{2}\right) \div \dfrac{1}{8}$

   (d) $\dfrac{4}{5} - \dfrac{1}{2}$

7. Evaluate:
   (a) $26.5 + 13.35 + 47.2$

   (b) $43.7 - 5.81$

8. Evaluate:
   (a) $3.14 \times 16 \times 2$

   (b) $38.5 \div 11$

9. Evaluate:
   (a) $0.7 \times 0.6 \times 0.3$

   (b) $27 \div 0.9$

10. Evaluate:
    (a) $5 \times (2 + 0.2) - 4 \div 16$

    (b) 0.8×0.9

    (c) $5.8 + 6.2 \times 0.2$

20. Given that $h = 7$ and $k = -1$, evaluate
   (a) $3h + 4k$,   (b) $2h^2$,   (c) $h(3k - 10)$.

21. Given that $a = -4$, $b = 3$ and $c = 0$, find the value of
   (a) abc,   (b) $a - 2b + 3c$,
   (c) $a^2 - b^2 + c^2$.

22. Evaluate the following by taking $p = 4$, $q = \frac{1}{2}$, $r = -3$ and $s = -\frac{3}{4}$.

   (a) $5p + (r - s)$ (b) $\frac{1}{2}(2p - 3q) + \frac{r}{s}$

   (c) $7pr^2 + 4q^2s$ (d) $rs\left(\frac{1}{p} - \frac{1}{q}\right)$

   (e) $3p^2q - 6sr$ (f) $pr + r[(q + 8s - pq) - 6q]$

23. Find the product of the following:
   (a) $7w$ and $5x$ (b) $3w$ and $-8x$ (c) $6m$ and $7n^2$
   (d) $9pq$ and $-4p^2q$ (e) $15c$ and $-9c$ (f) $-4a$ and $-23a$

24. Find the quotient
   (a) when $168a^2$ is divided by $12a$,
   (b) when $-49xy$ is divided by $-14y$,
   (c) when $44p$ is divided by $-66pq$,
   (d) when $52c(-d)$ is divided by $4b(-c)$,
   (e) when $-17rs$ is divided by $85p(-r)$,
   (f) when $24ab$ is divided by $\frac{1}{3}ab^2$.

25. Simplify:
   (a) $10a + b - 15a + 3b$ (b) $2(a + b) - 5(a + 2b)$

   (c) $\frac{1}{3}(2x + y) - \frac{5}{6}x + \frac{2}{9}y$

26. Simplify $5x - 4[2x - (6y - 3x)]$.

27. Simplify:

   (a) $4(a + 3b) - 15b$ (b) $\frac{1}{3}[4a - (6 - 5a)]$

28. Simplify $-5a - \frac{1}{3}a + 3\left(\frac{1}{6}a - 7\right)$.

29. Simplify:

   (a) $\frac{2x - 5}{3} - \frac{3x - 7}{5}$ (b) $\frac{1}{5}x - \frac{7}{2}\left[\frac{6}{21}x - \left(\frac{3}{7}y - \frac{1}{14}x\right)\right]$

Time : $\frac{3}{4}$ hour

Marks : 40

ALL questions may be attempted.

Answers are to be written on the question paper in the spaces provided.

Omission of essential workings will result in loss of marks. No calculators are allowed.

This paper consists of 10 questions.

1. Evaluate the following:

   (a) $\left(2\frac{1}{3} + 1\frac{2}{9}\right) \times 2\frac{2}{5}$ [1]

   (b) $\{6 \times [108 \div (-17 + 8)] - 36\} + 12$ [2]

   (c) $12^2 - 2^3 + 7^2$ [1]

   Ans (a) _____

   (b) _____

   (c) _____

2. Given that $-3 \leqslant p \leqslant 4$ and $2 \leqslant q \leqslant 6$, find

   (a) the least possible value of $p - q$,   [1]

   (b) the least possible value of pq.   [1]

   Ans (a) _____

   (b) _____