

1. Workout:

(a) $(-2b) - (-3b)$

(b) $18 \div (6-3) \times 4 - 2$

2. Workout:

(a)
$$\frac{1\frac{4}{5} + \frac{7}{13}}{1 + \left(1\frac{4}{5} \times \frac{7}{13}\right)}$$

(b)
$$\frac{3\frac{1}{8} + 1\frac{2}{3}}{\frac{2}{3} \times \frac{5}{12}}$$

3. (a) After spending $\frac{5}{6}$ of her money, a girl finds that she has shs. 2,400 left, how did she have at first?

(b) Betty is nine years younger than David. John is three times as old as Betty. The sum of all their ages is 49.

Find

(i) John's age,

(ii) David's age.

4. (a) Find the Lowest Common Multiple (LCM) and the Highest Common Factor (HCF) of 54 and 84.

(b) Express 1089 as a product of its prime factors and hence find $\sqrt{1089}$.

5. (a) If A and B are two sets of objects and $n(A) = 10$, $n(B) = 7$, $n(A \cup B) = 13$, $n(A \cap B)' = 2$. Find

(i) $n(\mathcal{E})$, Where \mathcal{E} is the universal set.

(ii) $n(A \cap B)$.

(b) Given the sets: $A = \{\text{All natural numbers less than } 30\}$
 $B = \{\text{All prime numbers between } 10 \text{ and } 30\}$

Find (i) $n(A \cap B')$

(ii) $n(A' \cap B)$

END.