

Q 1: Add and Subtract Rational Numbers

Add and subtract the following rational numbers:

a) $\frac{2}{3} + \frac{5}{6}$

b) $\frac{7}{8} - \frac{3}{4}$

Show your steps clearly.

Q 2: Multiply and Divide Rational Numbers

- Multiply

a) $\frac{4}{5} \times \frac{3}{7}$.

b) $6 \frac{4}{7} \times 5 \frac{2}{3}$.

- Divide:

a) $\frac{4}{5} \div \frac{3}{6}$

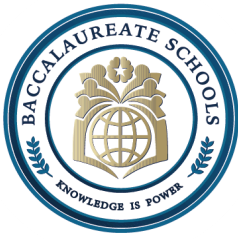
b) $5 \frac{3}{4} \div 6 \frac{2}{3}$

Show your steps and simplify if necessary.

Q 3: Ratios and percent

a) - If a car travels 150 miles in 3 hours, what is the distance in miles per 1 hour?

- If the car travels for 9 hours , what distance is it moved ?



b) What is 64% of the 4444 ?

c) What is 190% of 3000 \$?

Q4. Find the value of following expression

1. $3(2x - 4) + 3y - (y^2)$, when $x = 3$, $y = -2$

2. $(4z - 6) - (3z + 9) + 10$, when $z = 3$

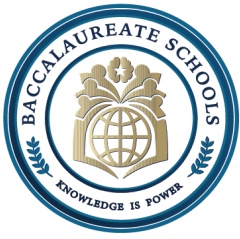
3. $(11 - 4y) + 7y - 3(3 - y)$, when $y = 4$

4. $(3 - x^2) + (9 + 3x^2)$, when $x = -2$

Q5. Simplify the expressions and use the right property (Commutative property , Associative Property , Distributive property , factor out)

a- $3xy^2 - 9xy + 6x^2y$ factor out

b- $3(z - 3) + 9(z + 1)$ distributive property



c- $7y - 2x - 3y + 3x - 12$ commutative property

Q6. Evaluate the following expression

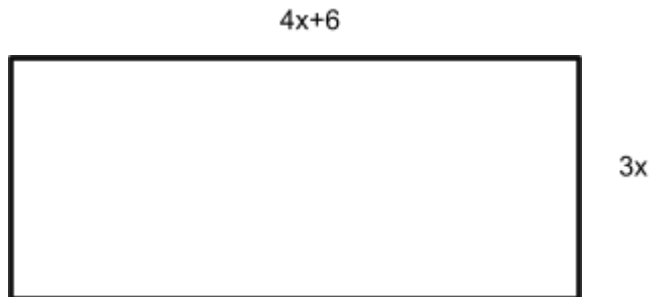
a. $(3 - x)(9 - x)$

b. $4(x - y) + y(4 - x)$

c. $17x - 2(13x + 9x)$

Q7. Find the perimeter of following figures

a.



b.

