Subject: Mathematics

Class: 8

Topic: Addition and Subtraction of Rational Numbers

Levels: Basic, Intermediate, Advanced

Level: Basic

1. Find the sum: 3/7 + 2/7. Write the answer in simplest form.

2. Subtract 1/5 from 4/5. Show your steps ?.

3. Arjun spent ? 1/2 on a pencil and ? 1/4 on an eraser. Total spent: ? _____.

4. Simplify: (-5/9) + (2/9). Use the number line concept ?.

5. What is the additive inverse of -11/15? _____

6. Find the value of 0 + (-3/4).

7. Subtract: 7/10 - 3/10. Is the result a rational number? (Yes/No)

8. Solve: 1/3 + 1/6 (Hint: Make denominators same ?).

9. True or False: The sum of two rational numbers is always a rational number ?.

10. Represent the result of 1/2 - 1/2 using the symbol ?.

Subject: Mathematics

Class: 8

Topic: Addition and Subtraction of Rational Numbers

Levels: Basic, Intermediate, Advanced

Level: Intermediate

1. Add: 5/12 and -7/18. Find the LCM of denominators first.

2. Priya had ? 50/3. She gave ? 20/3 to her brother. How much is left? ? _____

3. Evaluate: (2/3 + 4/5) - 1/2. Use brackets carefully ?.

4. What number should be added to -5/8 to get 5/8? _____

5. Simplify the expression: -3/4 - (-7/6).

6. The sum of two rational numbers is -5. If one is -13/3, find the other ?.

7. Find the perimeter of a triangle with sides 2/3 cm, 5/6 cm, and 1/2 cm ?.

8. Subtract the sum of 1/2 and 1/3 from 2. Result: _____

9. Solve for x: x + 1/4 = 3/8. Write x as a rational number.

10. Is (1/2 - 1/3) the same as (1/3 - 1/2)? Explain using ? symbols.

Subject: Mathematics

Class: 8

Topic: Addition and Subtraction of Rational Numbers

Levels: Basic, Intermediate, Advanced

Level: Advanced

1. Simplify: [1/2 - (-1/3)] + [2/5 - 1/10]. Express in decimal if possible.

2. A container has 25/4 litres of milk. If 7/2 litres are consumed, find the remaining quantity.

3. Verify the property: a + (b + c) = (a + b) + c for a=1/2, b=-1/3, c=1/4 ?.

4. Find the difference between the additive inverse of 3/4 and -5/6.

5. Calculate: (? + ?) where ? = 2/7 and ? = 3/14. Simplify the fraction.

6. If x = 1/2 and y = 1/3, find the value of (x + y) - (x - y).

7. The area of a square is x^2. If the side is 3/2 cm, find the sum of all four sides.

8. A worker earns ? 100/3 per hour. If he works for 3/4 of an hour and then 1/2 an hour, total earnings? ?

_____

9. Find a rational number exactly halfway between 1/4 and 1/2 using (a+b)/2.

10. Challenge: Solve 1/2 - 1/4 + 1/8 - 1/16. Use the pattern to find the sum ?.