









Notes for
your notebook

FRACTIONS

Adding/subtracting-**SAME** denominator

$$\frac{\text{numerator}}{\text{denominator}} \quad \frac{2}{5} + \frac{1}{5} = \frac{3}{5}$$

Add the numerators
Denominator stays the same

We can only add/subtract fractions with the same denominator

Practice together-write in your notebook

$$\frac{2}{9} + \frac{3}{9} = \frac{5}{9}$$

$$\frac{2}{7} - \frac{1}{7} = \frac{1}{7}$$

Reducing Fractions

If a number will go into both the numerator and denominator,
reduce the fraction

Are these fractions reducible?

$$\frac{6}{9} = \frac{2}{3}$$

$$\frac{5}{7}$$

Write these out in your notebook

$$1) \quad \frac{4}{11} + \frac{6}{11} =$$

$$1) \quad \frac{3}{11} - \frac{1}{11} =$$

$$2) \quad \frac{2}{10} + \frac{6}{10} =$$

$$2) \quad \frac{3}{7} - \frac{2}{7} =$$

Adding/subtracting-DIFFERENT denominators

If one denominator is a factor of another

$$\frac{2}{3} + \frac{1}{6} =$$

If one denominator is a factor of another (ex: 3 goes into 6) then only change one of the fractions

Practice together- write in your notebook

$$\frac{1}{3} + \frac{2}{9} =$$

$$\frac{1}{5} - \frac{3}{10} =$$

Adding/subtracting-DIFFERENT denominators

If one denominator is not a factor of another

$$\frac{2}{3} + \frac{1}{4} =$$

If one denominator is NOT a factor of another (ex: 3 does not go into 4 evenly) then change both of the fractions

Practice together- write in your notebook

$$\frac{1}{5} + \frac{2}{3} =$$

$$\frac{1}{2} + \frac{1}{3} =$$

$$1) \quad \frac{1}{2} + \frac{1}{3} =$$

$$1) \quad \frac{1}{2} - \frac{2}{5} =$$

Mixed numbers and improper fractions

$$7\frac{3}{5} =$$

$$\frac{13}{2} =$$

Multiplying Fractions

Multiply straight across

$$\frac{3}{7} \cdot \frac{4}{5} =$$

$$\frac{9}{10} \cdot \frac{1}{2} =$$

Dividing Fractions by Fractions

Multiply the 1st by the reciprocal of the second

$$\frac{3}{7} \div \frac{4}{5} =$$

$$\frac{9}{10} \div \frac{1}{2} =$$

Cross Cancelling

$$\left(\frac{3}{4}\right) \cdot \left(\frac{4}{5}\right) =$$

$$\left(\frac{5}{7}\right) \cdot \left(\frac{14}{15}\right) =$$

Order of Operations

PEMDAS

Parentheses

Exponents

Multiply/Divide

Add/Subtract

$$7 + 3 \cdot 8 - 4 =$$

$$1) \quad 8 \times (13 \times 8 - 9^2) + 3$$

$$2) \quad (20 - 6) \times (12 + 2) + 2^2$$

$$1) [(-8) \cdot (-2)^2 - (-8)] - (-2) \cdot (-6)$$

$$3) [(-2) \cdot (-3)^2 - (-2)] - (-3) \cdot (-10)$$

