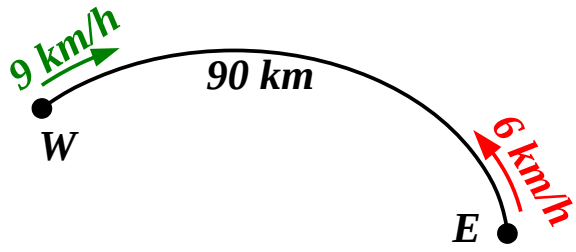
Lesson № 24

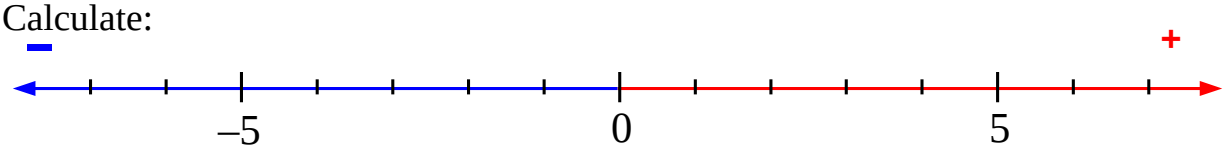
1 Explain the meaningful expressions related to the story below.

*East coast cats live **90 km** from the West coast cats. Every day at noon each tribe sends a messenger to the other tribe. East coast cats are great runners so they can run **6 km/h**. West coast cats cannot run as quick, so they ride bikes **9 km/h**.*



90 : 9	How long …
90 : 6	
6 + 9	
6 × 9	
6 – 9	
90 : (6 + 9)	
12 + 90 : (6 + 9)	When …
12 : (6 + 9)	

2 Calculate:



6 + 3 =	6 + (–3) =	6 – 3 =	6 – (–3) =
(–2) + 5 =	(–2) + (–5) =	(–2) – 5 =	(–2) – (–5) =
0 + 5 =	0 + (–5) =	0 – 5 =	0 – (–5) =

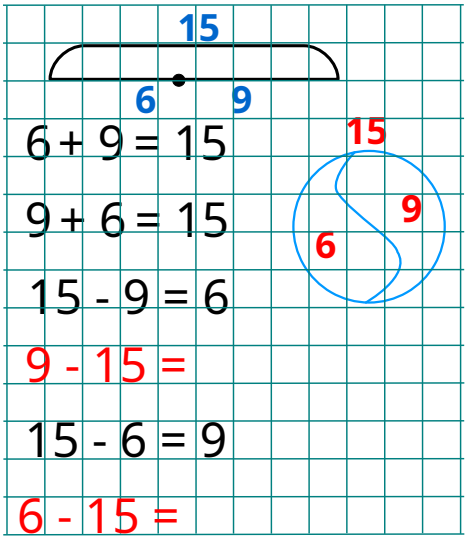
3 Do the arithmetic with “magic numbers” that are plotted on the “magic number line”

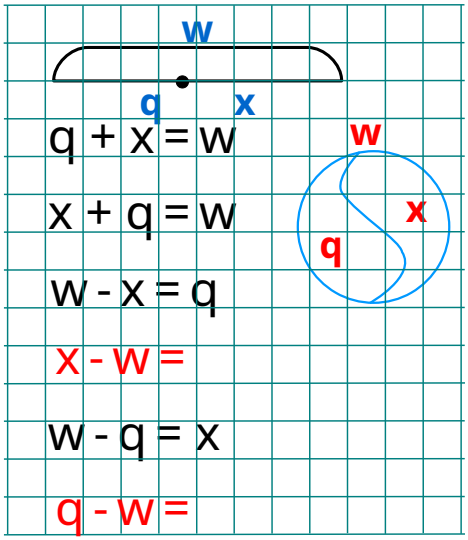
Δ Θ Λ Σ Ω ∏

Σ + 1 = Σ + (–1) = Σ + (–2) = Σ – (–1) =

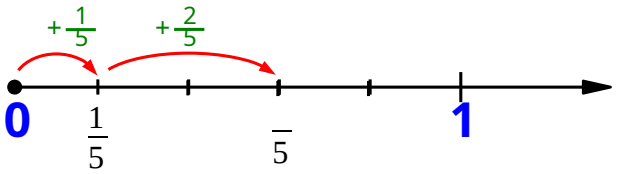
Ω – Σ = Σ – Ω = Σ – Θ = Θ – Σ =

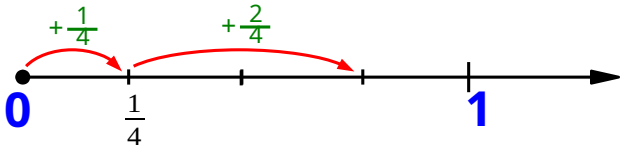
4 Analyze additional equalities with a whole and its parts.





5 Use number lines to add fractions with like denominators.



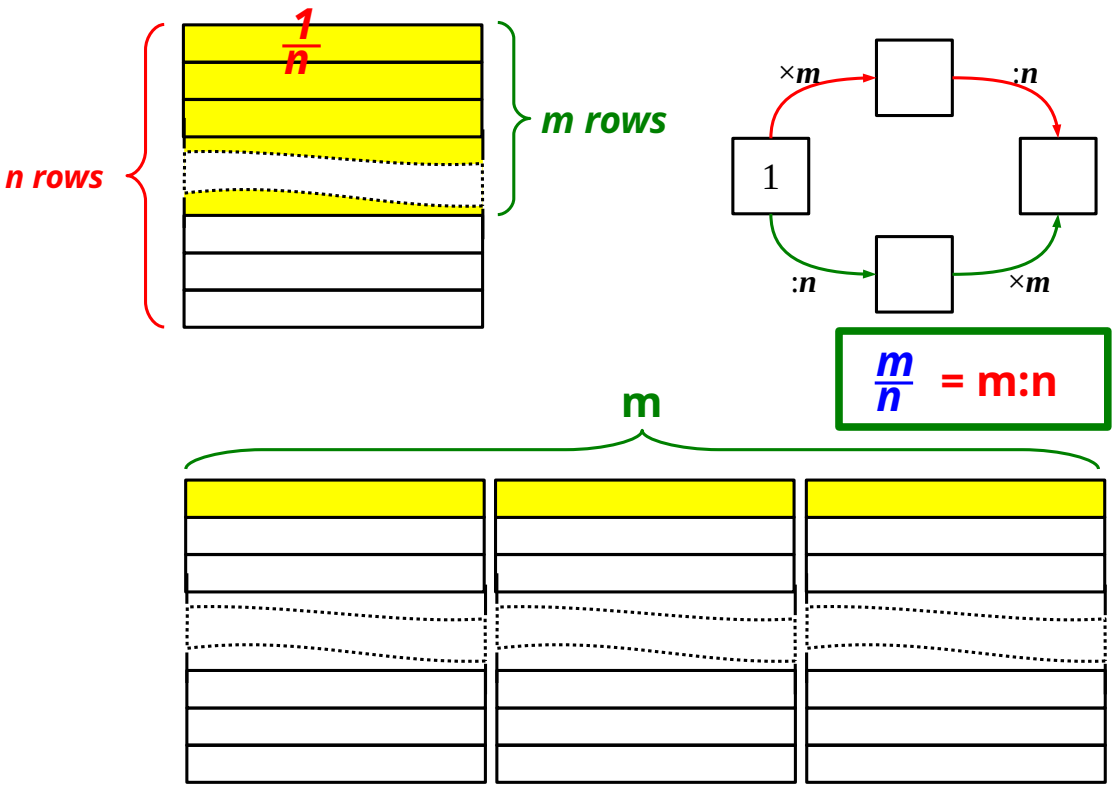


$\frac{1}{5} + \frac{2}{5} =$ $\frac{1}{4} + \frac{2}{4} =$ $\frac{1}{7} + \frac{2}{7} + \frac{3}{7} =$

$\frac{1}{8} + \frac{1}{8} + \frac{3}{8} =$ $\frac{1}{n} + \frac{1}{n} + \frac{1}{n} + \frac{1}{n} =$ $\frac{1}{m} + \frac{1}{m} + \frac{2}{m} + \frac{4}{m} =$

$1 - \frac{2}{5} =$ $1 - \frac{3}{4} =$ $1 - \frac{3}{7} =$

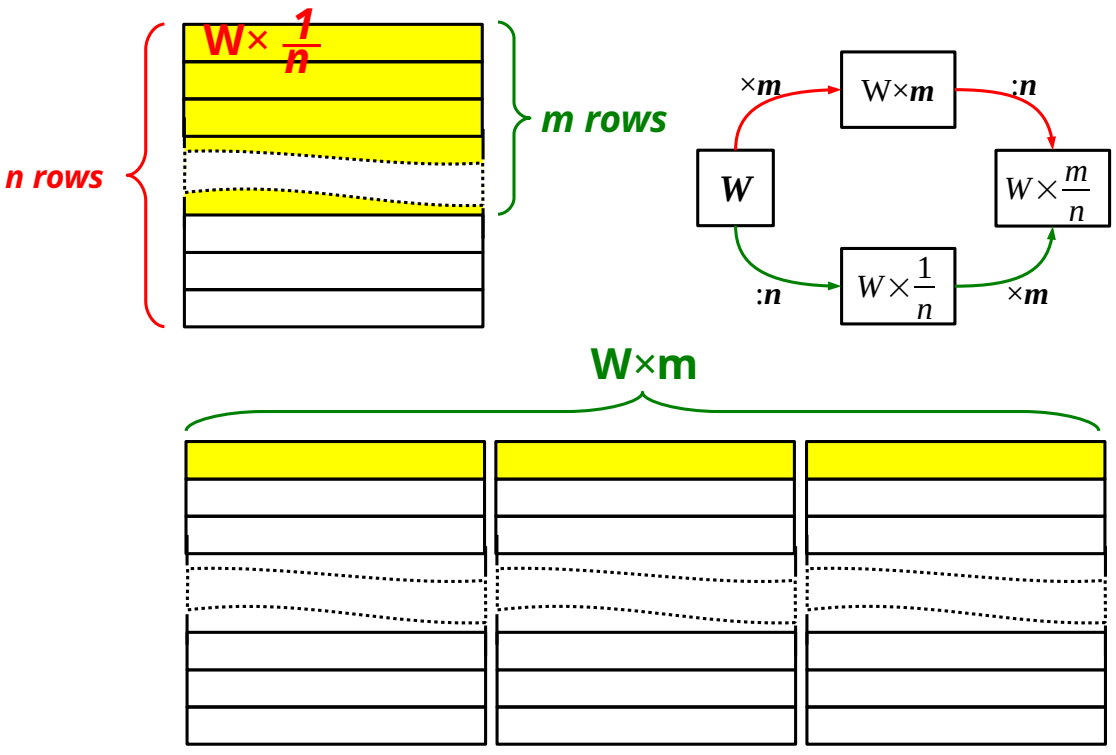
Arbitrary Fraction of a Unit $\frac{m}{n}$.



6 Calculate and express the results fractions:

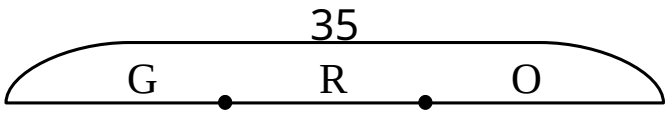
$2 : 9 = \frac{\square}{\square}$	$5 : 9 = \frac{\square}{\square}$	$7 : 9 = \frac{\square}{\square}$	$k : 9 = \frac{\square}{\square}$
$3 : 5 = \frac{\square}{\square}$	$6 : 5 = \frac{\square}{\square}$	$11 : 5 = \frac{\square}{\square}$	$m : 5 = \frac{\square}{\square}$
$1 : m = \frac{\square}{\square}$	$q : m = \frac{\square}{\square}$	$n : 7 = \frac{\square}{\square}$	$k : 4 = \frac{\square}{\square}$

Finding a fraction of a number.



7 There are 35 marbles in the bag. ⅕ of these marbles is green. ⅖ of the marbles are red. The rest of them are orange.

How many green marbles are in the bag?



_____

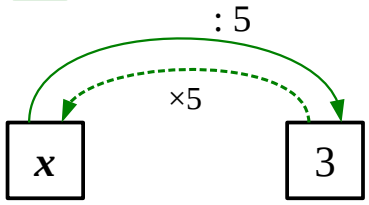
How many red marbles are in the bag?

_____

How many orange marbles are in the bag?

_____

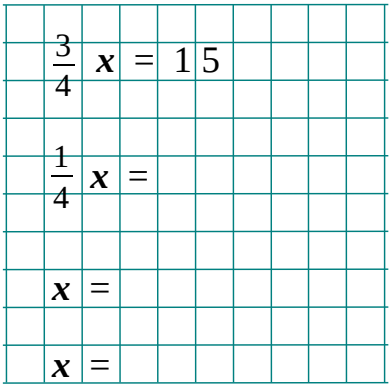
8 Solve the equations:



$\frac{1}{5}x = 3$

$x =$

$x =$

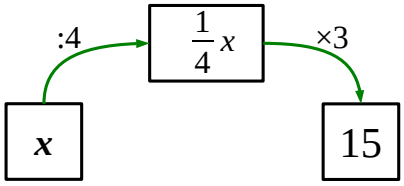


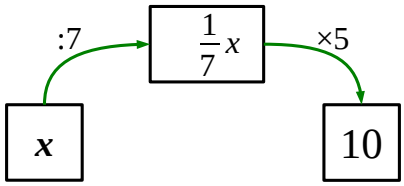
$\frac{3}{4}x = 15$

$\frac{1}{4}x =$

$x =$

$x =$





$\frac{5}{7}x = 10$

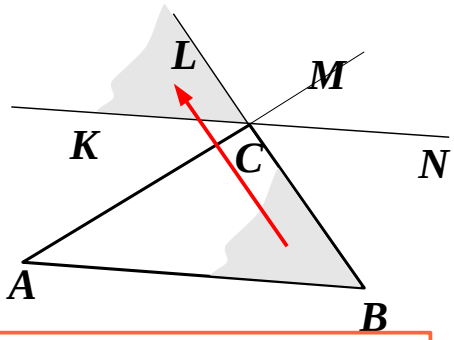
$\frac{1}{7}x =$

$x =$

$x =$

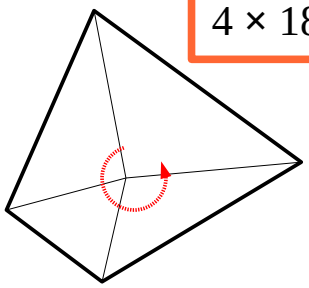
Angle Sums of Polygons.

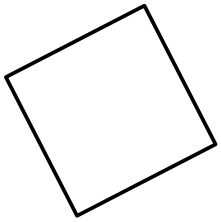
9



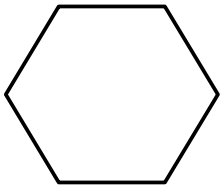
$\angle A + \angle B + \angle C = 180^o$

$4 \times 180^o - 360^o = 360^o$

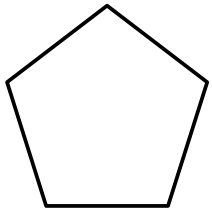




How large is an angle of a square? _____



What is the angle sum of a pentagon? _____



How large is an angle of a regular pentagon? _____

What is the angle sum of a hexagon? _____

How large is an angle of a regular hexagon? _____