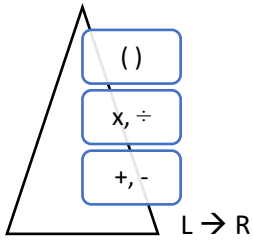
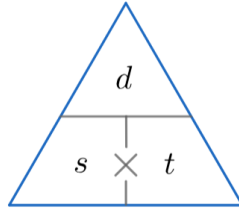


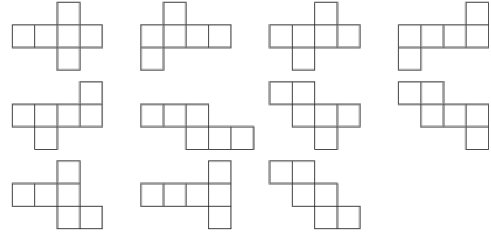
ORDER OF OPERATION



SPEED



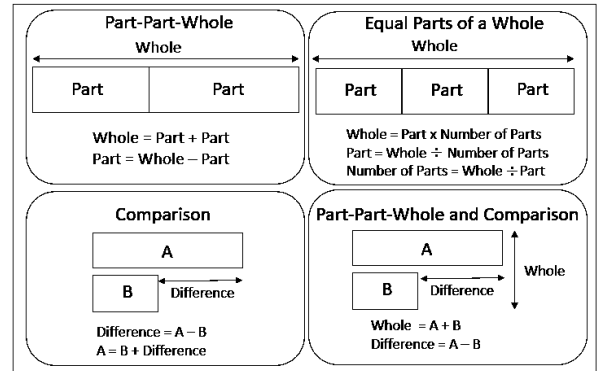
11 NETS OF CUBE



COMMON NUMBERS

%	50	25	75	20	60	12.5
Decimal	0.5	0.25	0.75	0.20	0.60	0.125
Fraction	$\frac{1}{2}$	$\frac{1}{4}$	$\frac{3}{4}$	$\frac{1}{5}$	$\frac{3}{5}$	$\frac{1}{8}$

MODELS



RATIOS

The choc is $\frac{2}{5}$ of the cake.
* Common item: make them the same before solving

PERCENTAGE

Percentage = out of 100
% change = $\frac{\text{Increase/decrease}}{\text{original}} \times 100\%$
% discount (-) = $\frac{\text{discount}}{100} \times \text{price}$
% GST (+) = $\frac{7}{100} \times \text{price}$

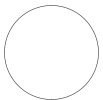
CONVERSION

1 L = 1000 ml = 1000 cm³
1 km = 1000 m
1m = 100 cm
1 cm = 10 mm
\$1 = 100 cents
1 day = 24 hours
1 hour = 60 min
1 min = 60 sec

SQUARE & SQUARE ROOT

$2 \times 2 = 2^2 = 4$
 $\sqrt{4} = \sqrt{2 \times 2} = 2$

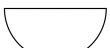
CIRCLE



Area: πr^2
Circumference: $2\pi r$



Area: $\frac{3}{4}\pi r^2$
Circumference: $(\frac{3}{4} \times 2\pi r) + 2r$



Area: $\frac{1}{2}\pi r^2$
Circumference: $\pi r + 2r$



Area: $\frac{1}{4}\pi r^2$
Circumference: $(\frac{1}{4} \times 2\pi r) + 2r$

QUADRILATERALS

Shape	Properties	Picture	Area formula
Parallelogram	<ul style="list-style-type: none"> Both opposite sides parallel Both opposite sides congruent Both opposite angles congruent Consecutive angles supplementary Diagonals are congruent 		$A = bh$
Rectangle	<ul style="list-style-type: none"> All the properties of a parallelogram 4 right angles Diagonals are congruent 		$A = bh$
Rhombus	<ul style="list-style-type: none"> All the properties of a parallelogram 4 congruent sides Diagonals are perpendicular Diagonals bisect the angles 		Add area of each triangle
Square	<ul style="list-style-type: none"> All the properties listed above 		$A = s^2$ or $A = bh$
Trapezoid	<ul style="list-style-type: none"> One pair of parallel sides Consecutive angles supplementary If isosceles: <ul style="list-style-type: none"> The legs are congruent Base angles are congruent Diagonals are congruent 		$A = \frac{h(b_1 + b_2)}{2}$
Kite	<ul style="list-style-type: none"> Consecutive sides are congruent Diagonals are perpendicular One pair of opposite angles congruent 		Add area of each triangle

LINES & ANGLES

