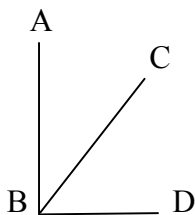# Ereybixinta Aljebta Joomatari

1) **acute angle / xagal fiiqan**
   an angle less than 90°
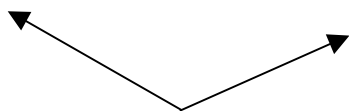
   acute
   angle   90° angle
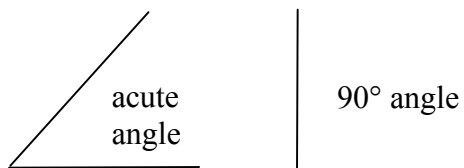
2) **acute triangle / saddex-xagal xaglo fiiqan**
   a triangle where all angles are less than 90°
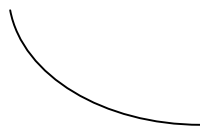
   <90°
   <90°   <90°
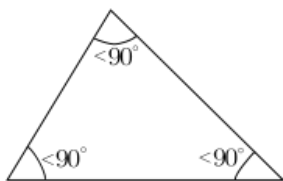
3) **adjacent angles / xaglo deris ah**
   angles that share a common leg

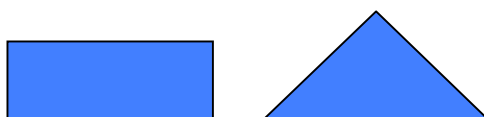   Example: ∠ABC and ∠CBD share the leg $\overline{BC}$.

   A
   C
   B   D

4) **angle / xagal**
   two lines, segments or rays with a common point that form an opening
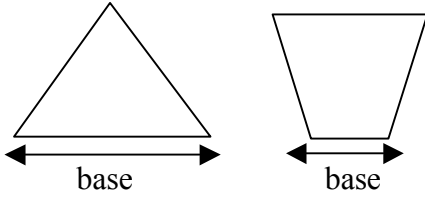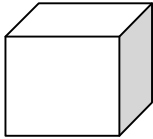
5) **arc / gacan**
   part of a circle
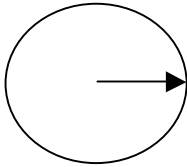
6) **area / bed**
   a measure of the inside of a shape

7) **base / sal**
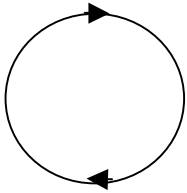   the bottom of a geometric shape

base   base

8) **box / sanduuq**
   a rectangular shape with six sides

9) **circle / goobo**
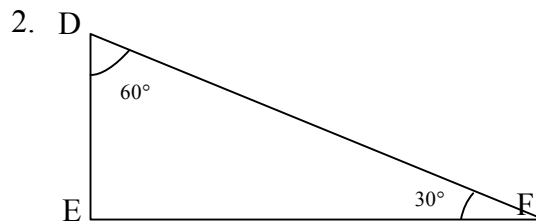   a closed loop that is an equal distance from a center point

10) **circumference / meeris, wareeg**
   the distance around the edge of a circle

11) **complimentary angles / xaglo sidkan**
   two angles that total 90°
   Example 1: ∠A and ∠C are complimentary because 45° + 45° = 90°
   Example 2: ∠D and ∠F are complimentary because 60° + 30° = 90°

   1. A   2. D

   45°   60°

   B   45°   C   E   30°   F
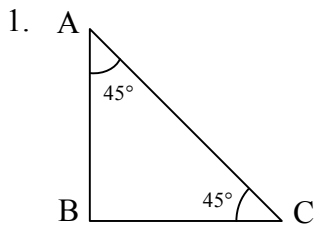
12) **cone / toobin**
   a geometric shape that tapers smoothly from a flat, round base to a point

13) **congruent / isku-sargo'an**
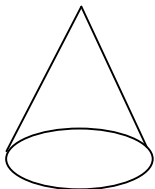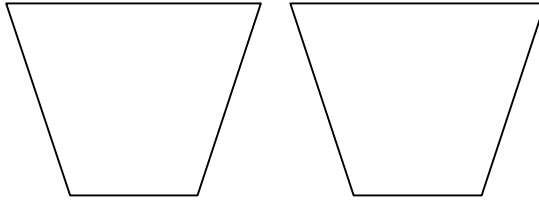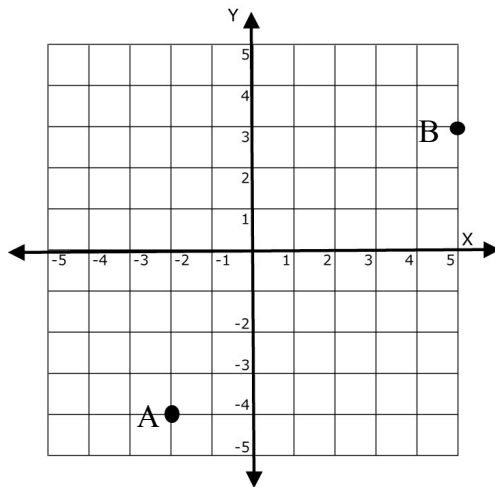   two geometric shapes that have the same angles or size
   Example: These two shapes are congruent. They are the same size and have the same angles.

14) **coordinates / bar-kulanka**
   a pair of numbers that locate points on a grid
   Example: In this grid the coordinates of A are (-2, -4) and of B are (5, 3).

15) **coordinate geometry / joomatariga bar-kulan**
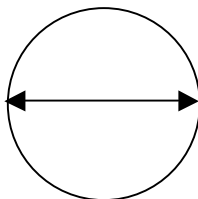   geometry of points on a grid

16) **cylinder / dhululubo**
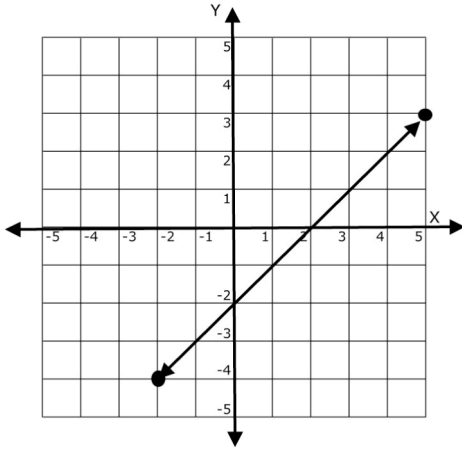   a geometric shape that is circular with flat ends
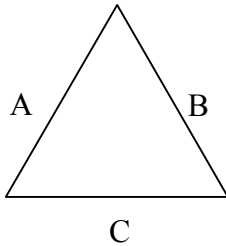
17) **diameter / dhexroor**
   the distance across a circle through the center point

18) **distance between points / masaafada u dhexeysa laba barood**
   the space between points measured on a geometric grid

19) **equilateral triangle / saddex-xagal isleeke**
   a triangle with all 3 sides of equal length
   Example: Side A = side B = side C.

20) **equivalent / la mid ah**
   equal to, the same as

21) **exponents / jibaaro**
   a small number written to the right and above another number, to indicate the number of times to multiply it by itself
   Example: 5^3 = 5 x 5 x 5

22) **figure / shaxan**
   a geometric shape
   Example: A square or a circle is a figure.

23) **formula / xeer, qaaciido**
   a number sentence or equation
   Example: The area of a rectangle = length x width.

24) **height / joogga**
   the distance from the bottom to the top of a figure
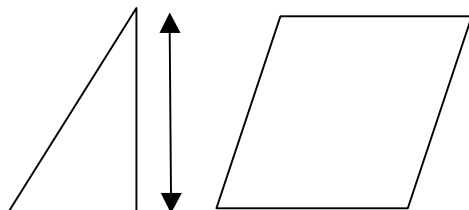
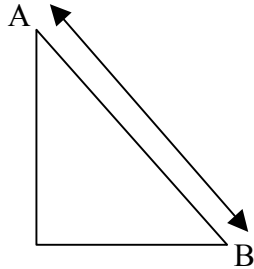25) **horizontal / jiifka**
   parallel to the horizon, across the page
   Example: This line is horizontal.

   _____

26) **hypotenuse / shakaal**
   the long side of a right triangle
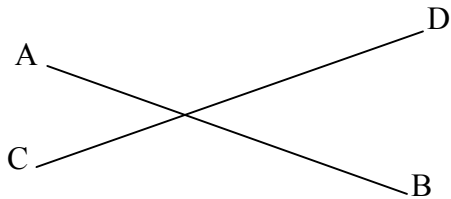   Example: Side $\overline{AB}$ is the hypotenuse.

A

B

27) **identical / la mid ah**
   the same

28) **intersecting lines / xariiqo is jaraya**
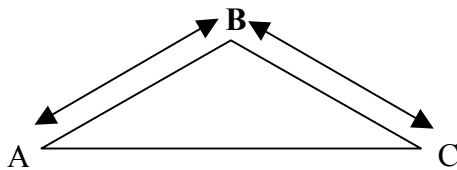   two lines that cross
   Example: Segment $\overline{AB}$ intersects segment $\overline{CD}$.

D

A

C

B

29) **isosceles triangle / saddex-xagal labaale**
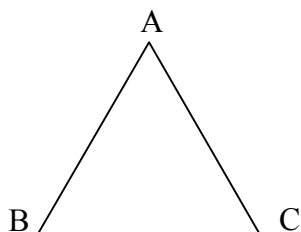   a triangle with 2 equal sides
   Example: In this triangle side $\overline{AB}$ equals side $\overline{BC}$.

B

A   C

30) **legs / lugo**
   the lines that form a triangle
   Example: $\overline{AB}$ is one leg, $\overline{AC}$ is another leg and $\overline{BC}$ is the third leg.

A

B   C
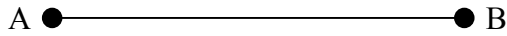
5

31) **length / dherer**

the distance from one end point to another the longer way

32) **line segment / gobol xariijin**

a line with two end points

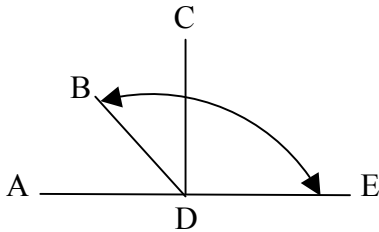Example: $\overline{AB}$ is a line segment.

A •————————————————• B

33) **math expression / tibaax xisaabeed**

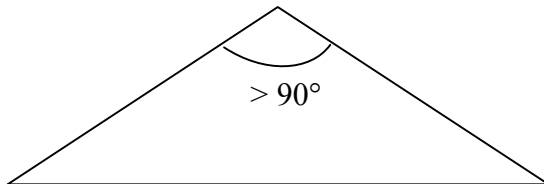number sentence or formula

34) **obtuse angle / xagal furan**

an angle that is larger that 90° but less that 180°

Example: ∠BDE is obtuse because it's larger than 90° and less than 180°.

35) **obtuse triangle / saddex-xagal furan**

a triangle with one angle larger that 90°

> 90°

36) **order of operations / kala-horeynta xisaab-falo**

the correct order to do math operations in a formula

Example: Do multiplication and division first, and then do addition and subtraction, unless they are in parentheses ( ).
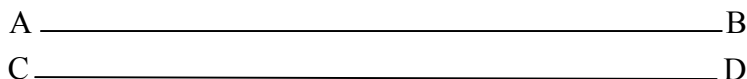
To solve the problem 3 + 4 x 2 = N first do step 1: 3 + (4 x 2) = N.

then do step 2: 3 + 8 = 11.

37) **parallel lines / xariiqo barbar ah**

two lines that are parallel and equidistant

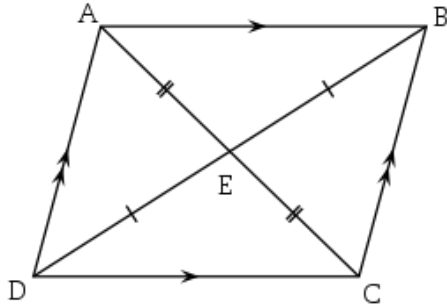Example: Line $\overline{AB}$ and line $\overline{CD}$ are parallel.

A ————————————————————— B

C ————————————————————— D

6

38) **parallelogram / barbaroole**
a quadrilateral with both pairs of opposite sides parallel and equal in length.
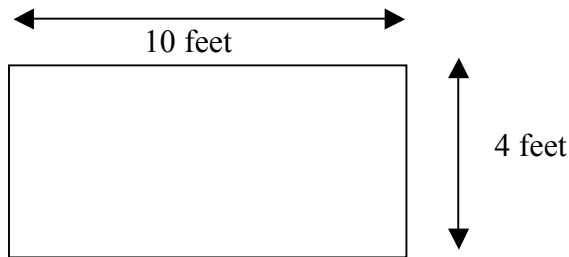
Example: Sides $\overline{AB}$ and $\overline{DC}$ are parallel and equal in length, and sides $\overline{AD}$ and $\overline{BC}$ are also parallel and equal in length.

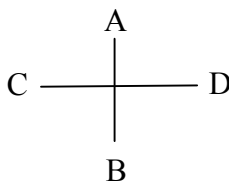39) **perimeter / wareeg**
the distance around a shape
Example: The perimeter of a rectangle = 2 x length (10 feet) + 2 x width (4 feet)
The perimeter of this rectangle is 28 feet.

40) **perpendicular lines / xariiqo ku ligan sallax, xariiqo isku qotoma**
two lines that cross forming 90° angles

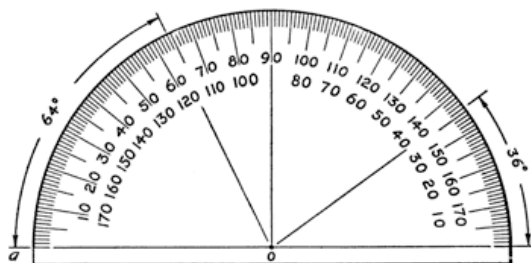Example: Line $\overline{AB}$ is perpendicular to line $\overline{CD}$.

41) **pi (π) / bay**
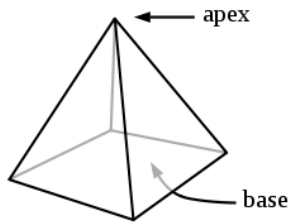the mathematical constant value is approximately 3.14

42) **protractor / xaglo-cabire**
an instrument used in drawing and measuring angles
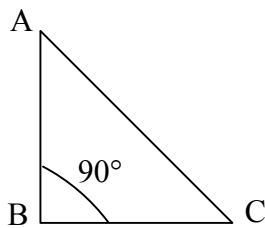

7

43) **pyramid / haram**
a solid object where the base is usually a square and triangular sides meet at the apex (top).

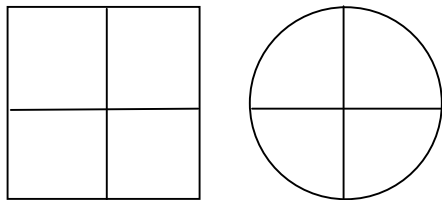44) **Pythagorean relationship / xidhiidhka Bitoogaras**
The formula for right triangles states that the square of the longest side (the hypotenuse) is equal to the square of the other 2 sides.
Example: $\overline{AB}^2 + \overline{BC}^2 = \overline{AC}^2$
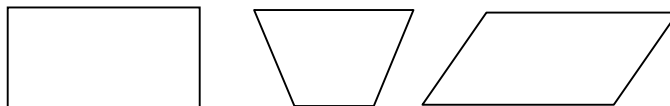

45) **quadrant / rubuc**
any of the 4 areas created by dividing a square or circle with horizontal and vertical lines

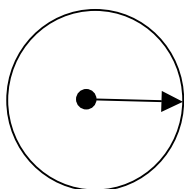

46) **quadrilateral / afar dhinacle**
a four sided shape
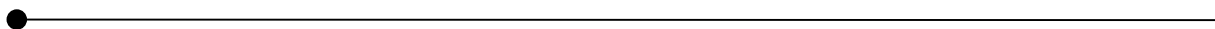Example: These are all quadrilaterals.

47) **radius / gacan**
the distance from the center to the edge of a circle

48) **ray / xariiq dhamaad lahayn**
a line with a starting point but no ending point.

49) **reciprocal / rogal**
the reciprocal of a number is 1 divided by that number.
Example: $1 \div 2 = \frac{1}{2}$. The reciprocal of 2 is $\frac{1}{2}$.
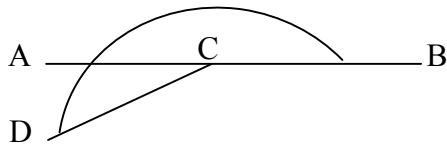
50) **rectangle / laydi**
a 4-sided shape where all interior angles are 90°

51) **reflex angle / xagal daacsan**
an angle more that 180°
Example: ∠DCB is a reflex angle.

A _____ C _____ B

D
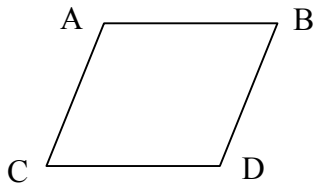
52) **repeating pattern / saansaan celcelis leh**
numbers that follow in order from a mathematical operation
Examples: 1, 3, 5, 7, 9 etc. is pattern, and so is 2, 4, 8, 16, 32, etc.
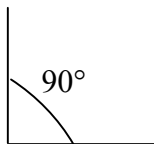
53) **rhombus / barbaroole dhinacyo isleeke**
a quadrilateral with all four sides equal in length
Example: In this figure side $\overline{AB}$ = side $\overline{BD}$ = side $\overline{AC}$ = side $\overline{CD}$.
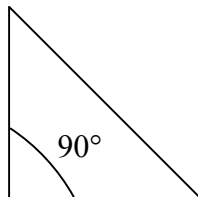
A _____ B

C _____ D
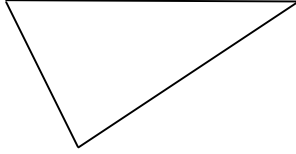
54) **right angle / xagal quman**
a 90° angle

90°

55) **right triangle / saddex-xagal xagal quman**
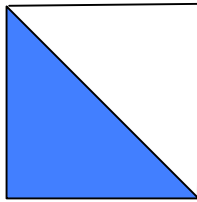a triangle with one 90° angle

90°

56) **scalene triangle / saddex-xagal isma leeke**
   a triangle where all three sides are different in length
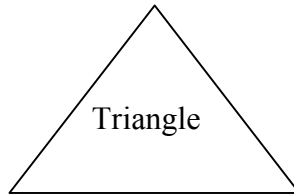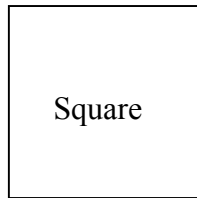
57) **sequence / sususan**
   numbers in a pattern
   Example: 2, 4, 6, 8, etc.

58) **set of numbers / urur tiro**
   a group of numbers used in an equation

59) **shaded / hadheysan**
   colored or darkened
   Example: Half of the square is shaded.

60) **side / dhinac**
   one part of the geometric shape
   Example: A square has 4 sides and a triangle has 3 sides.

Square

Triangle

61) **slope of a line / janjeedhka xariiq**
   an expression of the amount a line goes up or down as a ratio of the change in y over the change in x
   Example: This line goes up 1 on the y axis for every 1 on the x axis. The slope is 1:1.
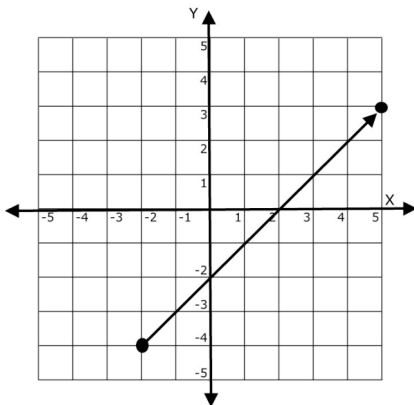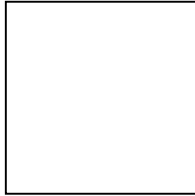
62) **solid / adke**
   a three dimensional geometric shape
   Example: A cube is a solid and a cylinder is a solid.

   Cube   Cylinder
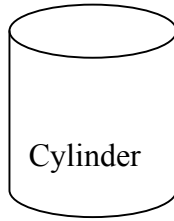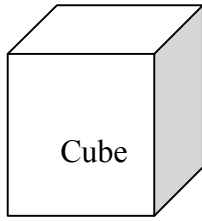
63) **square / labajibaarane**
   a four sided shape with four 90° angles and sides of equal length

64) **square root / xidid labajibaaran**
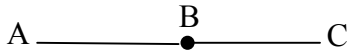   a number that when multiplied by itself equals a given number
   Example: 5 is the square root of 25 because 5 x 5 = 25
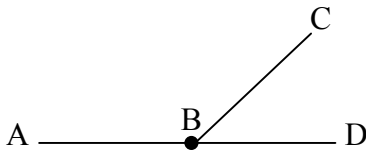
65) **straight angle / xagal toosan**
   an angle of 180°
   Example: ∠ABC is 180°

   A ——— B ——— C

66) **supplementary angles / xaglo is buuxsha**
   two angles that total 180°
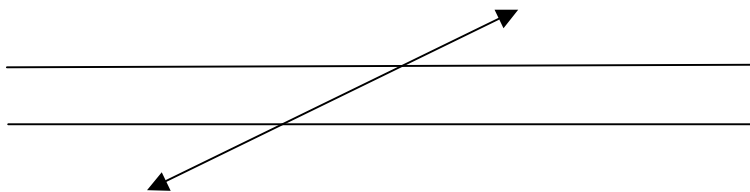   Example: ∠ABC + ∠CBD = 180°

   A ——— B —— D   C

67) **the power of x / la jibaaray x**
   indicating the number of times to multiply a number by itself
   Example: 2 to the power of 3 = 2^3 = 8
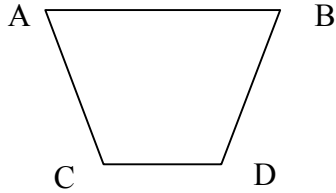
68) **transversal / wadaajiye**
   a line that cuts across two or more (usually parallel) lines
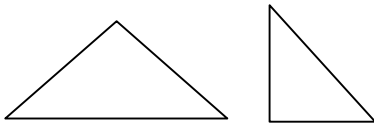
69) **trapezoid / koor**
   A quadrilateral with only one pair of parallel sides
   Example: Side $\overline{AB}$ is parallel to side $\overline{CD}$.

   A ⎡‾‾‾‾‾‾‾‾⎤ B
   C   D

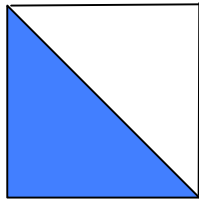70) **triangle / saddex-xagal**
   a three sided shape

71) **true / run ah**
   a mathematically correct answer

72) **unshaded / aan hadheysnayn**
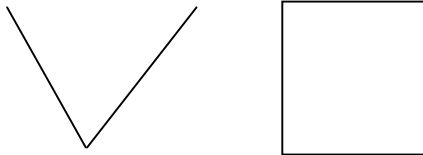   not colored or darkened
   Example: Half of the square is unshaded.

73) **vertex / gees**
   the common end points of two lines
   Example: An angle has one vertex, a square has 4 vertices.
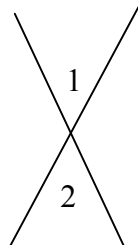
74) **vertical / joog**
   up and down in direction

75) **vertical angles / xaglo gees wadaaga**
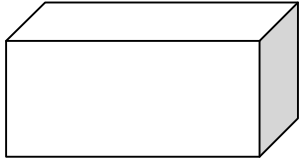   two non-adjacent angles with the same measure, formed when two straight lines cross
   Example: $\angle 1$ and $\angle 2$ are vertical angles.

   1

   2

76) **volume / mug**
   the amount of space inside a three dimensional geometric shape
   Example: The volume of a rectangular solid is the length x width x height.

77) **width / balaac**
   the distance from side to side the shorter way