39) Find the surface area of the figure. Use 3.14 for pi.

— 4.2 cm

Height of Cylinder
8.3 cm
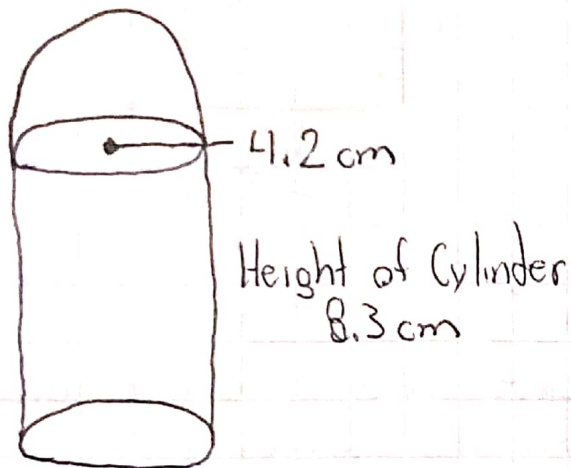
Sphere

$$S = \frac{4\pi r^2}{2}$$

Circle
$$A = \pi r^2$$

Rectangle
$$A = lw$$

$A = \pi (4.2)^2$
$A = 55.38 \text{ cm}^2$

$S = \frac{4\pi (4.2)^2}{2}$

$S = \frac{221.55}{2}$

$S = 110.775 \text{ cm}^2$

$A = 26.37 \times 8.3$
$A = 218.87 \text{ cm}^2$

$S_T = 55.38 \text{ cm}^2 + 110.775 \text{ cm}^2 +$
$\qquad 218.87 \text{ cm}^2$

$\boxed{S_T = 385.025 \text{ cm}^2}$

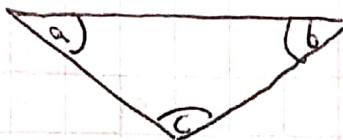# Angle Types and Rules

Acute angle
< 90°

Right angle
= 90°

obtuse angle
> 90° and < 180°

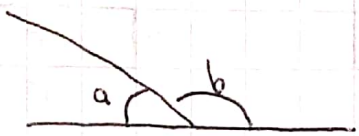straight line
= 180°
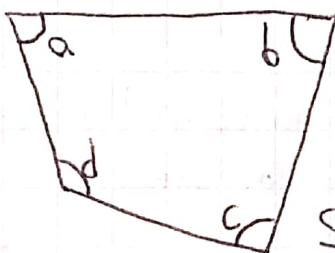
Reflex angle
> 180°
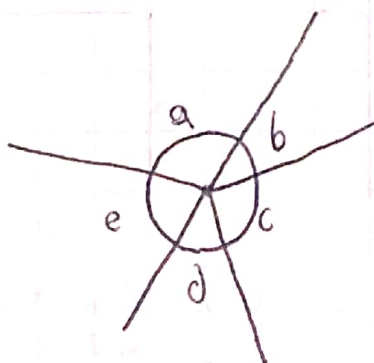
Angles in a triangle add up to 180°
So $a + b + c = 180°$

Angles on a straight line add up to 180°
So $a + b = 180°$

Angles in a quadrilateral add up to 360°
So $a + b + c + d = 360°$

Angles around a point add up to 360°
So $a + b + c + d + e = 360°$

Angles in regular shapes

Name of shape	Sides	Interior angles
equilateral triangle	3	$60°$
square	4	$90°$
regular pentagon	5	$108°$
regular hexagon	6	$120°$
regular heptagon	7	$128.6°$
regular octagon	8	$135°$
regular nonagon	9	$140°$
regular decagon	10	$144°$

Interior angles of regular n-sided polygons add up to $180(n-2)°$

Based on sides

Scalene triangle
All 3 sides have different lengths.
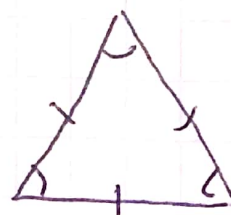Its angles are also all different.
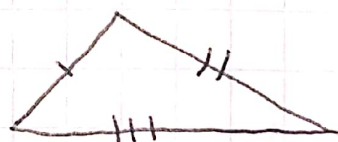
Isosceles triangle
2 sides have equal lenghts. 2 of its angles also measure equal.

Equlalateral triangle
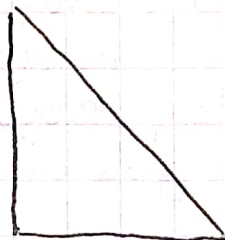All 3 sides are of the same length.
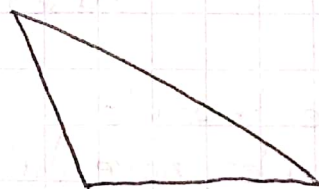All 3 angles are equal, $60°$

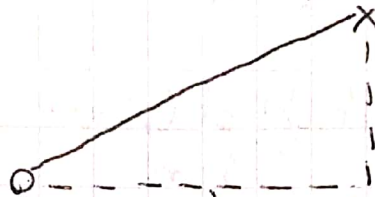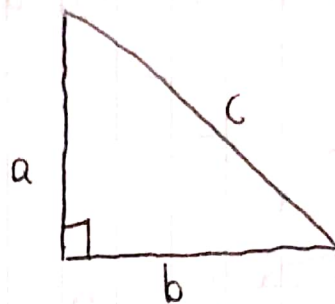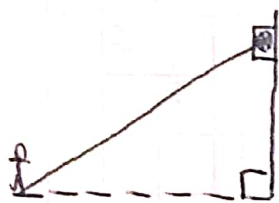# Based on angles

Acute triangle
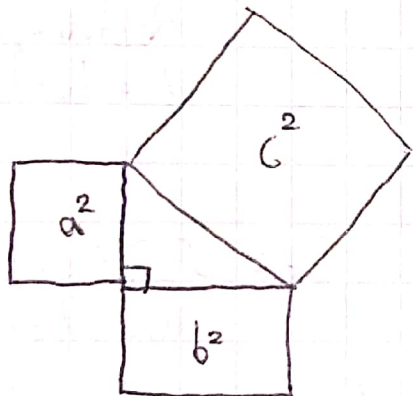All angles are less than 90°

Right triangle
Has 1 right angle (90°)

Obtuse triangle
Has one angle more that 90°

Pythagorean Theorem

$$a^2 + b^2 = c^2$$

$$c = \sqrt{a^2 + b^2}$$

Linea recta punto más cercano en dos puntos