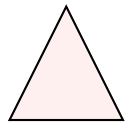
2D SHAPES

A PLANE GEOMETRY

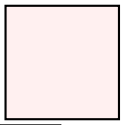
A.1 FINDING THE SIDES

Ex 1: How many sides does this shape have?



☐ sides

Ex 2: How many sides does this shape have?

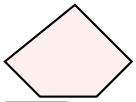


☐ sides

Ex 3: How many sides does this shape have?

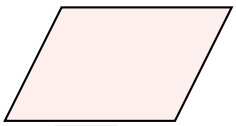
☐ sides

Ex 4: How many sides does this shape have?



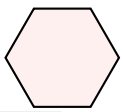
☐ sides

Ex 5: How many sides does this shape have?



☐ sides

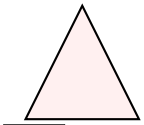
Ex 6: How many sides does this shape have?



☐ sides

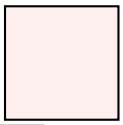
A.2 FINDING THE VERTICES

Ex 7: How many vertices does this shape have?



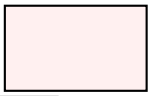
☐ vertices

Ex 8: How many vertices does this shape have?



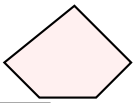
☐ vertices

Ex 9: How many vertices does this shape have?



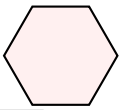
☐ vertices

Ex 10: How many vertices does this shape have?



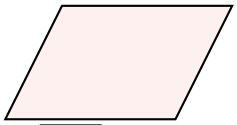
☐ vertices

Ex 11: How many vertices does this shape have?



☐ vertices

Ex 12: How many vertices does this shape have?

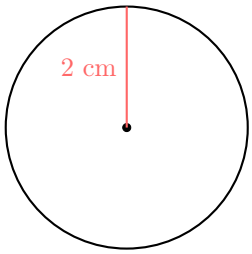


☐ vertices

B CIRCLES

B.1 FINDING DIAMETERS

Ex 13: What is the radius and what is the diameter of this circle?



Radius = ☐ cm

Diameter = ☐ cm

Ex 14: The wheel of a child's bicycle is a circle with a radius of 15 cm. What is its diameter?

Diameter = ☐ cm

Ex 15: A pizza is a circle with a radius of 15 cm. What is its diameter?

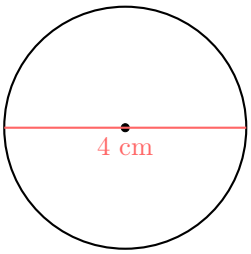
Diameter = ☐ cm

Ex 16: The Earth is a sphere with a radius of 6 000 km. What is its diameter?

Diameter = ☐ km

B.2 FINDING RADII

Ex 17: What is the radius and what is the diameter of this circle?



Radius = ☐ cm
Diameter = ☐ cm

Ex 18: The wheel of a child's bicycle is a circle with a diameter of 30 cm. What is its radius?

Radius = ☐ cm

Ex 19: A pizza is a circle with a diameter of 30 cm. What is its radius?

Radius = ☐ cm

Ex 20: The Earth is a sphere with a diameter of 12 000 km. What is its radius?

Radius = ☐ km

B.3 CONSTRUCTING CIRCLE WITH A RULER AND COMPASS

Ex 21: Construct a circle with a radius of 2 cm at center O, using a compass.

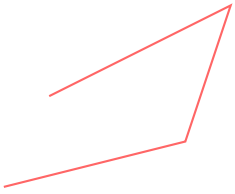
Ex 22: Construct a circle with a radius of 3 cm at center O, using a compass.

Ex 23: Construct a circle with a radius of 2.5 cm at center O, using a compass.

C POLYGONS

C.1 IDENTIFYING POLYGONS

MCQ 24: Is this figure a polygon?



Pick the correct answer:

☐ Yes

☐ No

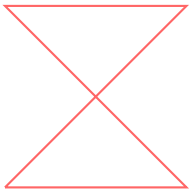
MCQ 25: Is this figure a polygon?

Pick the correct answer:

☐ Yes

☐ No

MCQ 26: Is this figure a polygon?

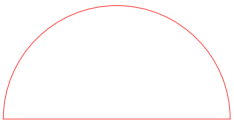


Pick the correct answer:

☐ Yes

☐ No

MCQ 27: Is this figure a polygon?



Pick the correct answer:

☐ Yes

☐ No

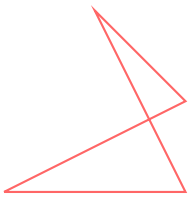
MCQ 28: Is this figure a polygon?

Pick the correct answer:

☐ Yes

☐ No

MCQ 29: Is this figure a polygon?

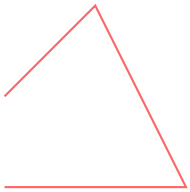


Pick the correct answer:

☐ Yes

☐ No

MCQ 30: Is this figure a polygon?



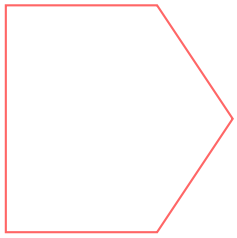
Pick the correct answer:

☐ Yes

☐ No

C.2 NAMING POLYGONS

MCQ 31: What is the name of this polygon?



Pick the correct answer:

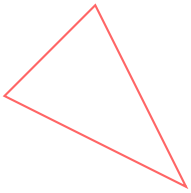
☐ Triangle

☐ Quadrilateral

☐ Pentagon

☐ Hexagon

MCQ 32: What is the name of this polygon?



Pick the correct answer:

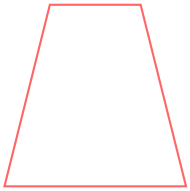
☐ Triangle

☐ Quadrilateral

☐ Pentagon

☐ Hexagon

MCQ 33: What is the name of this polygon?



Pick the correct answer:

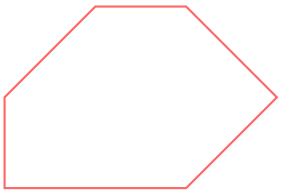
☐ Triangle

☐ Quadrilateral

☐ Pentagon

☐ Hexagon

MCQ 34: What is the name of this polygon?



Pick the correct answer:

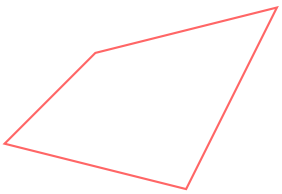
☐ Triangle

☐ Quadrilateral

☐ Pentagon

☐ Hexagon

MCQ 35: What is the name of this polygon?



Pick the correct answer:

☐ Triangle

☐ Quadrilateral

☐ Pentagon

☐ Hexagon

C.3 DRAWING POLYGONS

Ex 36: Draw a triangle.

Ex 37: Draw a quadrilateral.

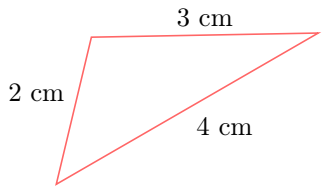
Ex 38: Draw a pentagon.

Ex 39: Draw a hexagon.

D TRIANGLES

D.1 CLASSIFYING TRIANGLES BY SIDE LENGTHS

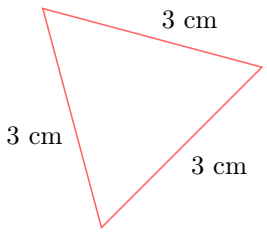
MCQ 40: Classify the triangle:



Choose one answer:

- ☐ Scalene
- ☐ Isosceles
- ☐ Equilateral
- ☐ Right-angled triangle

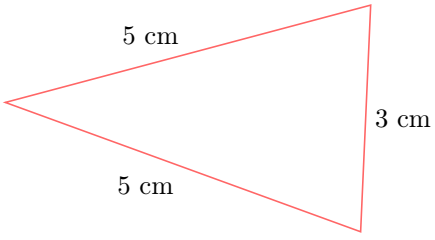
MCQ 41: Classify the triangle:



Choose one answer:

- ☐ Scalene
- ☐ Equilateral
- ☐ Right-angled triangle

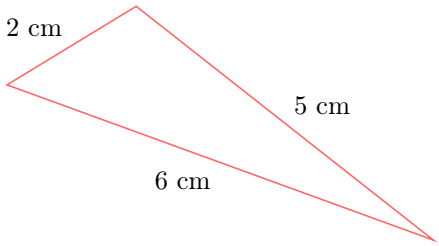
MCQ 42: Classify the triangle:



Choose one answer:

- ☐ Scalene
- ☐ Isosceles
- ☐ Equilateral
- ☐ Right-angled triangle

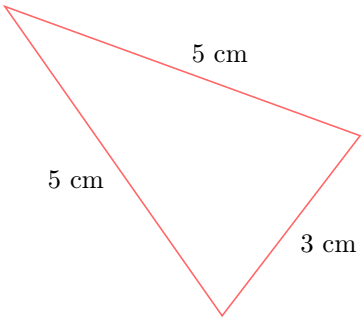
MCQ 43: Classify the triangle:



Choose one answer:

- ☐ Scalene
- ☐ Isosceles
- ☐ Equilateral
- ☐ Right-angled triangle

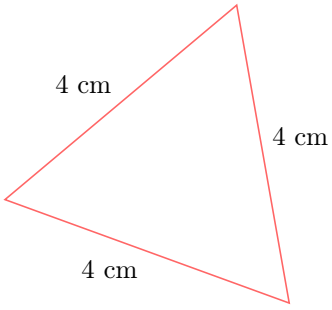
MCQ 44: Classify the triangle:



Choose one answer:

- ☐ Scalene
- ☐ Isosceles
- ☐ Equilateral
- ☐ Right-angled triangle

MCQ 45: Classify the triangle:

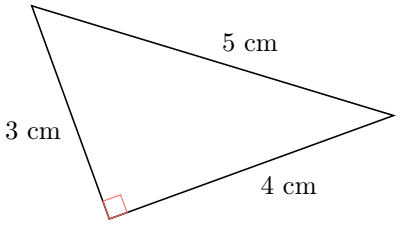


Choose one answer:

- ☐ Scalene
- ☐ Equilateral

☐ Right-angled triangle

MCQ 46: Classify the triangle:



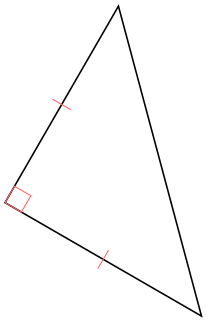
Choose one answer:

☐ Isosceles

☐ Equilateral

☐ Right-angled triangle

MCQ 47: Classify the triangle:



Choose two answers:

☐ Isosceles

☐ Equilateral

☐ Right-angled triangle

D.2 CONSTRUCTING TRIANGLES WITH A RULER AND COMPASS

Ex 48: Construct a triangle ABC with $AB = 3$ cm, $AC = 6$ cm, and $BC = 5$ cm, leaving the construction marks visible, using a ruler and a compass.

Ex 49: Construct a triangle ABC with $AB = 4$ cm, $AC = 3$ cm, and $BC = 5$ cm, leaving the construction marks visible, using a ruler and a compass.

Ex 50: Construct an equilateral triangle ABC with $AB = 4$ cm, leaving the construction marks visible, using a ruler and a compass.

Ex 51: Construct an isosceles triangle ABC with $AB = 4$ cm, $AC = 3$ cm, and $BC = 3$ cm, leaving the construction marks visible, using a ruler and a compass.

E QUADRILATERALS

E.1 DETERMINING PROPERTIES OF QUADRILATERALS

MCQ 52: A square has four right angles.
Choose one answer:

☐ True

☐ False

MCQ 53: The opposite sides of a rhombus are parallel.
Choose one answer:

☐ True

☐ False

MCQ 54: The adjacent sides of a rectangle are parallel.
Choose one answer:

☐ True

☐ False

MCQ 55: A square is a special type of rectangle.
Choose one answer:

☐ True

☐ False

MCQ 56: A rectangle is a special type of square.
Choose one answer:

☐ True

☐ False

MCQ 57: A rectangle is a special type of parallelogram.
Choose one answer:

☐ True

☐ False