Construction

Constructing circles

Reminder

Steps to construct a circle, O, using a pair of compasses.
Step 1: Align the pencil lead with the compass point.
Step 2: Tighten the hold on the pencil so that it does not slip.
Step 3: Set the pair of compasses to the radius of the circle you wish to draw.
Step 4: Place the compass point on point O and swing the other end of the compass around to draw the circle.

1. Draw the following.

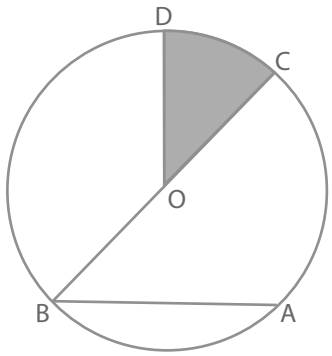
a) Circle with radius 16 mm

b) Circle with radius 2.4 cm

c) Circle with radius 2.5 cm

d) Circle with radius 20 mm

2. Complete the following.



a) O is called the

b) Line segment OD is a

c) Line segment BC is a

d) Line segment AB is a

e) The distance around the circle is called the

f) The shaded area inside the circle is called a

Construction

Perpendicular and parallel lines

Reminder

Steps to construct a set of perpendicular lines, using a ruler and a pair of compasses.
Step 1: Mark two points, A and B, on a line segment.
Step 2: Roughly measure a radius of over halfway between A and B, and set this on your compass.
Step 3: Using this setting on your compass, draw a small arc, P, from point A above the line, P, and a similar one, T, below the line.
Step 4: Keeping the same setting on your compass, draw arcs from B to intersect arc P above the line and arc T below. Call the points of intersection P and T.
Step 4: With your ruler, draw a line PT. We say that PT is perpendicular (90 °) to AB.

1. Use a compass and ruler to construct line CD perpendicular to line XY.

Reminder

Steps to construct a set of parallel lines, using a set square and ruler.
Step 1: Place a set square against a ruler.
Step 2: Draw a straight line along the free edge of the set square.
Step 3: Slide the set square along the ruler and draw another straight line along the free edge of the set square.
Step 4: Your two line segments will be parallel to each other.

2. Use a set square and ruler to construct line CD parallel to line XY.

3. Name two examples of lines that are parallel in real life (e.g. train tracks).