

**1** Compare the expressions without calculating its values. Use  $<$ ,  $>$ ,  $=$

$9 \times 50 \underline{\hspace{1cm}} 90 \times 5$

$40 \times 3 \underline{\hspace{1cm}} 20 \times 6$

$200 \times 3 \underline{\hspace{1cm}} 20 \times 30$

$80 \times 5 \underline{\hspace{1cm}} 8 \times 20$

$15 \times 8 \underline{\hspace{1cm}} 80 \times 5$

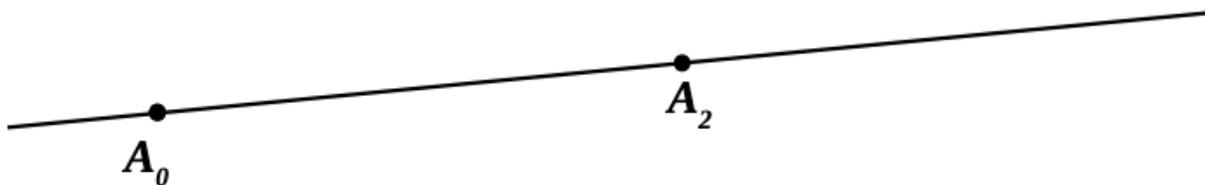
$50 \times 6 \underline{\hspace{1cm}} 30 \times 5$

**2** Insert the sign “-” where needed to make the equality correct:

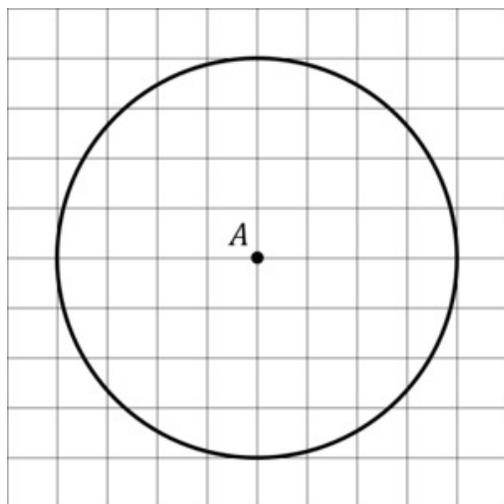
$6 \ 1 \ 5 \ 1 \ 4 \ 1 \ 3 \ 1 = 1$

**3** A bug is moving along a straight line. It started moving from the position  $A_0$  and in 2 minutes went into position  $A_2$ . Using a compass and a straightedge find ...

- A. ... the position of the bug after the first minute (point  $A_1$ ).
- B. ... the position of the bug after 3 minutes (point  $A_3$ ).



**4** Imagine that a circle with center  $A$  is drawn on 1cm grid paper as shown below. What is the radius of the circle?



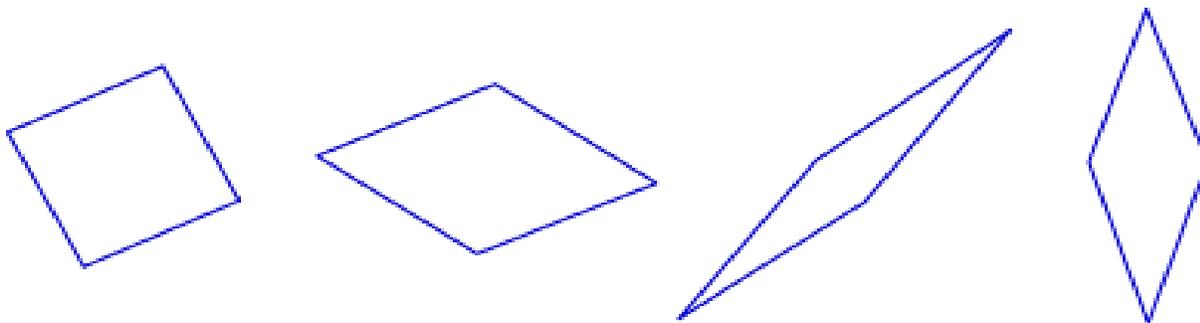
5

A few things around us that are circular in shape are a car tire, a wall clock that tells time, and a lollipop. Give at least two more example of the things with a circular shape around us.

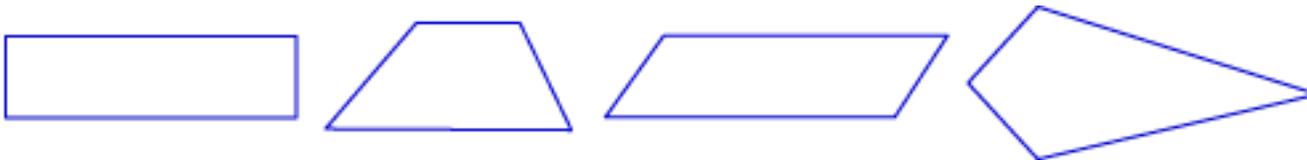
\_\_\_\_\_

6

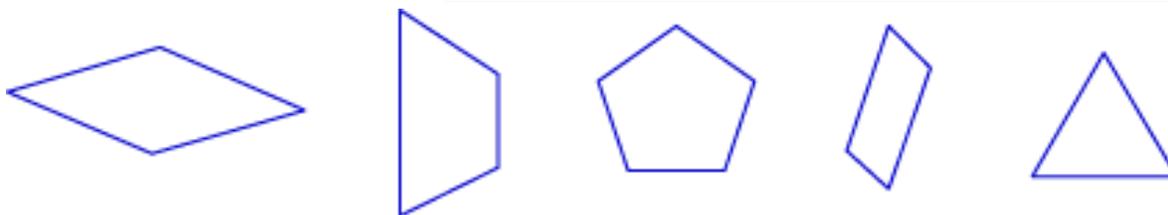
All of these figures have something in common. What is it? \_\_\_\_\_



None of these has it. What is it? \_\_\_\_\_



Which of these has it? What is it? \_\_\_\_\_



Explain.

\_\_\_\_\_

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Compare using  $<$ ,  $>$  or  $=$ :

810 cm \_\_\_\_\_ 8 m

7 m \_\_\_\_\_ 75 cm

1m \_\_\_\_\_ 100mm

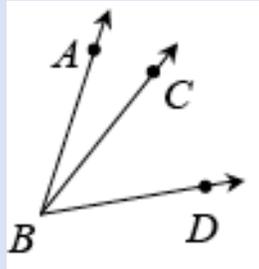
6m 57cm \_\_\_\_\_ 657cm

360 cm \_\_\_\_\_ 3m 60mm

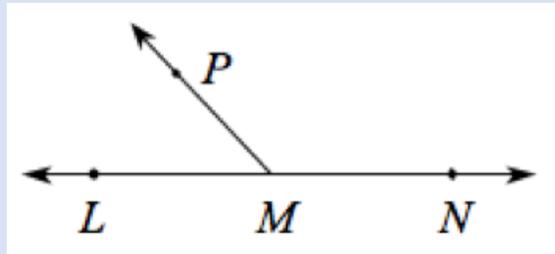
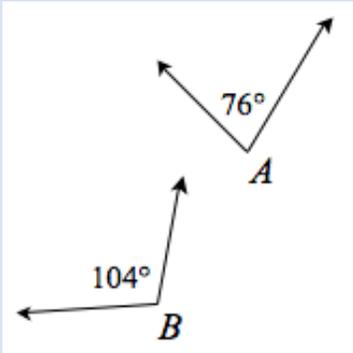
365mm \_\_\_\_\_ 36m 5mm

PLEASE READ THE DEFINITIONS OF ADJACENT AND SUPPLEMENTARY ANGLES

**Adjacent angles:** Two **angles** are **Adjacent** when they have a common side and a common vertex (corner point) and don't overlap. In the example at right,  $\angle ABC$  and  $\angle CBD$  are adjacent angles.



**Supplementary angles:** Two angles A and B for which  $A + B = 180^\circ$ . Each angle is called the supplement of the other. In the example at left, angles A and B are **supplementary**. Supplementary angles are often adjacent. For example, since  $\angle LMN$  is a straight angle, then  $\angle LMP$  and  $\angle PMN$  are supplementary angles because  $\angle LMP + \angle PMN = 180^\circ$ .



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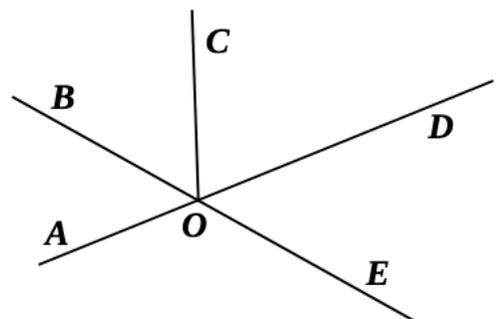
Find all pairs of supplementary angles on the drawing. Measure these angles with a protractor. Write down your results. Make sure supplementary angles add up to  $180^\circ$ .

$\angle AOB = 50^\circ$  and  $\angle BOD = \underline{\hspace{2cm}}$

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\_\_\_\_\_

\_\_\_\_\_





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Look at the sketch below.

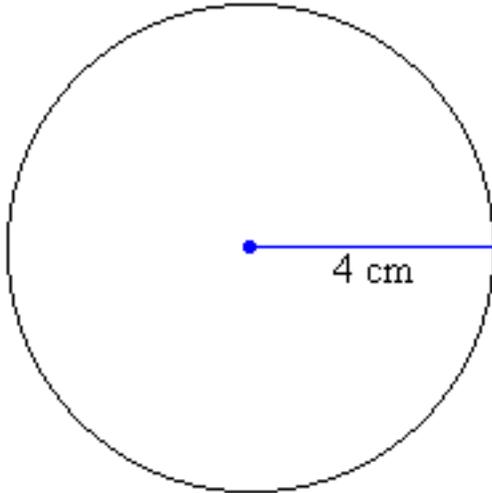
a) Using a compass, draw a circle with a radius of 4cm.

Reminder:

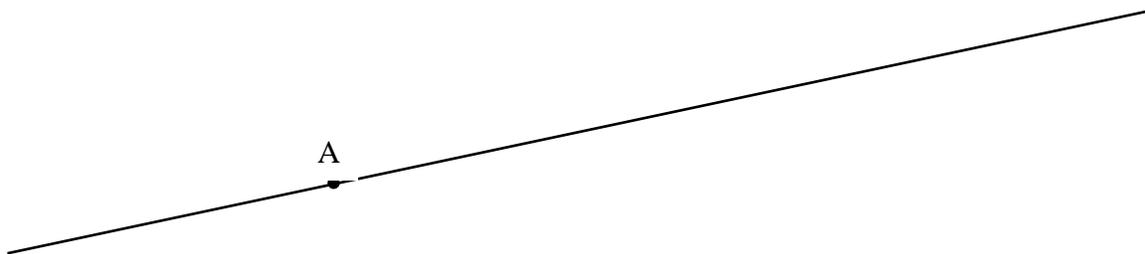
Step 1: Use a ruler to set the distance from the point of the compass to the pencil's lead at 4 cm.

Step 2: Place the point of the compass at the point A (point A will be the center of the circle).

Step 3: Draw the circle by turning the compass through  $360^\circ$ .



b) Mark the point where the circle intersects a line with a point B.



c) Using a compass, draw another circle with a radius of 4cm and the center in a point B.

d) Mark the points of intersection of two circles with points C and D.

e) Using a ruler, measure the distance between points C and D. What is the result of your measurement: \_\_\_\_\_ cm?