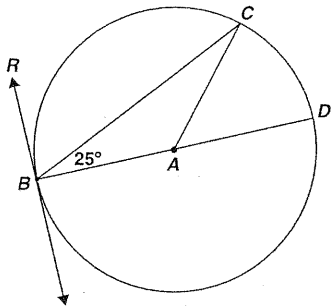
89 $\overline{RB}$ is tangent to a circle, whose center is A, at point B. $\overline{BD}$ is a diameter.



What is $m\angle CBR$?

A 50°

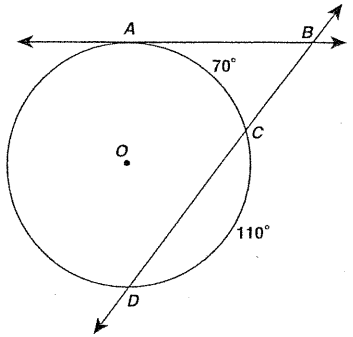
B 65°

C 90°

D 130°

CSG20186

90 In the figure below, $\overline{AB}$ is tangent to circle O at point A, secant $\overline{BD}$ intersects circle O at points C and D, $m\overset{\frown}{AC} = 70°$, and $m\overset{\frown}{CD} = 110°$.



What is $m\angle ABC$?

A 20°

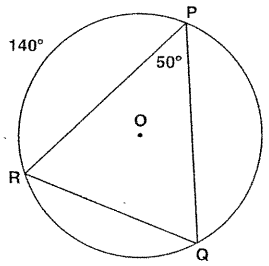
B 40°

C 55°

D 70°

CSG10257

91 In the circle shown below, the measure of $\overset{\frown}{PR} = 140°$ and the measure of $\angle RPQ = 50°$.



What is the measure of $\overset{\frown}{PQ}$?

A 50°

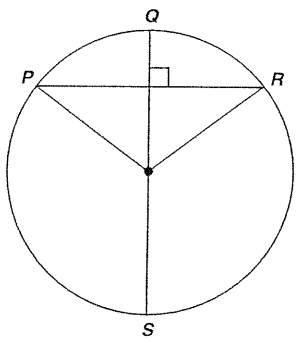
B 60°

C 70°

D 120°

CSG10003

92 $\overline{QS}$ is a diameter of the circle below, and $\overline{QS} \perp \overline{PR}$.



If $m\overset{\frown}{PQR} = 106°$, what is $m\overset{\frown}{PS}$?

A 53°

B 74°

C 106°

D 127°

CSG20187

93 The vertices of $\triangle ABC$ are $A(2, 1)$, $B(3, 4)$, and $C(1, 3)$. If $\triangle ABC$ is translated 1 unit down and 3 units to the left to create $\triangle DEF$, what are the coordinates of the vertices of $\triangle DEF$?

A $D(0, 1), E(1, 2), F(1, 3)$

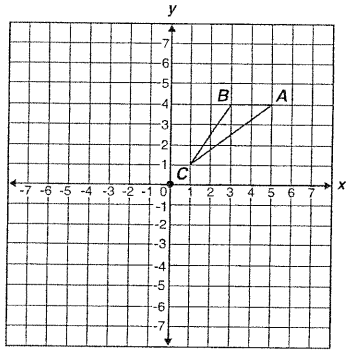
B $D(0, -1), E(0, 3), F(-2, -2)$

C $D(-2, 2), E(0, 3), F(-1, 0)$

D $D(-1, 0), E(0, 3), F(-2, 2)$

CSG00317

94 If triangle ABC is rotated 180 degrees about the origin, what are the coordinates of A'?



A $(-5,-4)$

B $(-5,4)$

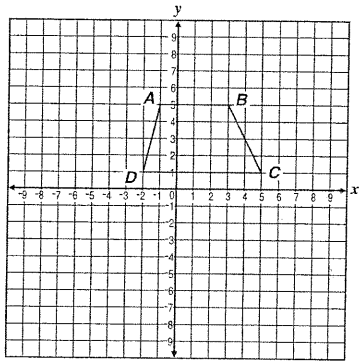
C $(-4,5)$

D $(-4,-5)$

CSG10096

95 Trapezoid $ABCD$ below is to be translated to trapezoid $A'B'C'D'$ by the following motion rule.

$$(x, y) \rightarrow (x+3, y-4)$$



What will be the coordinates of vertex C'?

A $(1,-3)$

B $(2,1)$

C $(6,1)$

D $(8,-3)$

CSG10214

96 Which expression describes the translation of a point from $(-3, 4)$ to $(4, -1)$?

A 7 units left and 5 units up

B 7 units right and 5 units up

C 7 units left and 5 units down

D 7 units right and 5 units down

CSG20057