Introduction - Geometry

The following released test questions are taken from the Geometry Standards Test. This test is one of the California Standards Tests administered as part of the Standardized Testing and Reporting (STAR) Program under policies set by the State Board of Education.

All questions on the California Standards Tests are evaluated by committees of content experts, including teachers and administrators, to ensure their appropriateness for measuring the California academic content standards in Geometry. In addition to content, all items are reviewed and approved to ensure their adherence to the principles of fairness and to ensure no bias exists with respect to characteristics such as gender, ethnicity, and language.

This document contains released test questions from the California Standards Test forms in 2003, 2004, 2005, and 2006. First on the pages that follow are lists of the standards assessed on the Geometry Test. Next are released test questions. Following the questions is a table that gives the correct answer for each question, the content standard that each question is measuring, and the year each question last appeared on the test.

The following table lists each reporting cluster, the number of items that appear on the exam, and the number of released test questions that appear in this document. Some of the released test questions for Geometry are the same test questions found in different combinations on the Integrated Mathematics 1, 2, and 3 California Standards Tests and the Summative High School Mathematics California Standards Test.

REPORTING CLUSTER	NUMBER OF QUESTIONS ON EXAM	NUMBER OF RELEASED TEST QUESTIONS
Logic and Geometric Proofs	23	22
Volume and Area Formulas	11	11
Angle Relationships, Constructions, and Lines	16	16
Trigonometry	15	15
TOTAL	65	64

In selecting test questions for release, three criteria are used: (1) the questions adequately cover a selection of the academic content standards assessed on the Geometry Test; (2) the questions demonstrate a range of difficulty; and (3) the questions present a variety of ways standards can be assessed. These released test questions do not reflect all of the ways the standards may be assessed. Released test questions will not appear on future tests.

For more information about the California Standards Tests, visit the California Department of Education's Web site at http://www.cde.ca.gov/ta/tg/sr/resources.asp.

THE LOGIC AND GEOMETRIC PROOFS REPORTING CLUSTER

The following seven California content standards are included in the Logic and Geometric Proofs reporting cluster and are represented in this booklet by 22 test questions. These questions represent only some ways in which these standards may be assessed on the Geometry California Mathematics Standards Test.

CALIFORNIA CONTENT STANDARDS IN THIS REPORTING CLUSTER

Geometry	
GE1.0*	Students demonstrate understanding by identifying and giving examples of undefined terms, axioms, theorems, and inductive and deductive reasoning.
GE2.0*	Students write geometric proofs, including proofs by contradiction.
GE3.0*	Students construct and judge the validity of a logical argument and give counterexamples to disprove a statement.
GE4.0*	Students prove basic theorems involving congruence and similarity.
GE5.0	Students prove that triangles are congruent or similar, and they are able to use the concept of corresponding parts of congruent triangles.
GE6.0	Students know and are able to use the triangle inequality theorem.
GE7.0*	Students prove and use theorems involving the properties of parallel lines cut by a transversal, the properties of quadrilaterals, and the properties of circles.

* Denotes key standards

THE VOLUME AND AREA FORMULAS REPORTING CLUSTER

The following four California content standards are included in the Volume and Area Formulas reporting cluster and are represented in this booklet by 11 test questions. These questions represent only some ways in which these standards may be assessed on the Geometry California Mathematics Standards Test.

CALIFORNIA CONTENT STANDARDS IN THIS REPORTING CLUSTER

Geometry	
GE8.0*	Students know, derive, and solve problems involving perimeter, circumference, area, volume, lateral area, and surface area of common geometric figures.
GE9.0	Students compute the volumes and surface areas of prisms, pyramids, cylinders, cones, and spheres; and students commit to memory the formulas for prisms, pyramids, and cylinders.
GE10.0*	Students compute areas of polygons, including rectangles, scalene triangles, equilateral triangles, rhombi, parallelograms, and trapezoids.
GE11.0	Students determine how changes in dimensions affect the perimeter, area, and volume of common geometric figures and solids.

* Denotes key standards

THE ANGLE RELATIONSHIPS, CONSTRUCTIONS, AND LINES REPORTING CLUSTER

The following six California content standards are included in the Angle Relationships, Constructions, and Lines reporting cluster and are represented in this booklet by 16 test questions. These questions represent only some ways in which these standards may be assessed on the Geometry California Mathematics Standards Test.

CALIFORNIA CONTENT STANDARDS IN THIS REPORTING CLUSTER

Geometry	
GE12.0*	Students find and use measures of sides and of interior and exterior angles of triangles and polygons to classify figures and solve problems.
GE13.0	Students prove relationships between angles in polygons by using properties of complementary, supplementary, vertical, and exterior angles.
GE14.0*	Students prove the Pythagorean theorem.
GE15.0	Students use the Pythagorean theorem to determine distance and find missing lengths of sides of right triangles.
GE16.0*	Students perform basic constructions with a straightedge and compass, such as angle bisectors, perpendicular bisectors, and the line parallel to a given line through a point off the line.
GE17.0*	Students prove theorems by using coordinate geometry, including the midpoint of a line segment, the distance formula, and various forms of equations of lines and circles.

* Denotes key standards

THE TRIGONOMETRY REPORTING CLUSTER

The following five California content standards are included in the Trigonometry reporting cluster and are represented in this booklet by 15 test questions. These questions represent only some ways in which these standards may be assessed on the Geometry California Mathematics Standards Test.

CALIFORNIA CONTENT STANDARDS IN THIS REPORTING CLUSTER

Geometry	
GE18.0*	Students know the definitions of the basic trigonometric functions defined by the angles of a right triangle. They also know and are able to use elementary relationships between them. For example, $\tan(x) = \sin(x)/\cos(x)$, $(\sin(x))^2 + (\cos(x))^2 = 1$.
GE19.0*	Students use trigonometric functions to solve for an unknown length of a side of a right triangle, given an angle and a length of a side.
GE20.0	Students know and are able to use angle and side relationships in problems with special right triangles, such as 30°, 60°, and 90° triangles and 45°, 45°, and 90° triangles.
GE21.0*	Students prove and solve problems regarding relationships among chords, secants, tangents, inscribed angles, and inscribed and circumscribed polygons of circles.
GE22.0*	Students know the effect of rigid motions on figures in the coordinate plane and space, including rotations, translations, and reflections.

* Denotes key standards

1 **Which of the following best describes deductive reasoning?**

A using logic to draw conclusions based on accepted statements

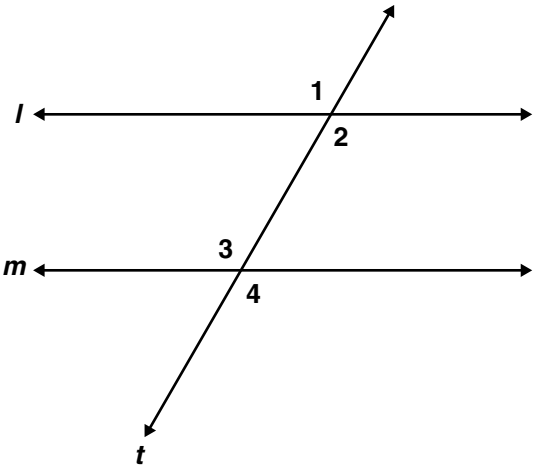
B accepting the meaning of a term without definition

C defining mathematical terms to correspond with physical objects

D inferring a general truth by examining a number of specific examples

CSG00185

2 **In the diagram below, $\angle 1 \cong \angle 4$.**



Which of the following conclusions does *not* have to be true?

A $\angle 3$ and $\angle 4$ are supplementary angles.

B Line l is parallel to line m.

C $\angle 1 \cong \angle 3$

D $\angle 2 \cong \angle 3$

CSG10066

3 **Theorem: A triangle has at most one obtuse angle.**

Eduardo is proving the theorem above by contradiction. He began by assuming that in $\triangle ABC$, $\angle A$ and $\angle B$ are both obtuse. Which theorem will Eduardo use to reach a contradiction?

A If two angles of a triangle are equal, the sides opposite the angles are equal.

B If two supplementary angles are equal, the angles each measure 90°.

C The largest angle in a triangle is opposite the longest side.

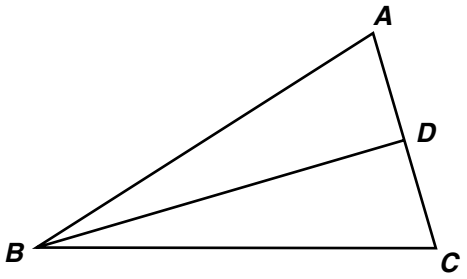
D The sum of the measures of the angles of a triangle is 180°.

CSG00025

4 **Use the proof to answer the question below.**

Given: $\overline{AB} \cong \overline{BC}$; D **is the midpoint of** $\overline{AC}$

Prove: $\triangle ABD \cong \triangle CBD$



	Statement		Reason
1.	$\overline{AB} \cong \overline{BC}$; D is the midpoint of $\overline{AC}$	1.	Given
2.	$\overline{AD} \cong \overline{CD}$	2.	Definition of Midpoint
3.	$\overline{BD} \cong \overline{BD}$	3.	Reflexive Property
4.	$\triangle ABD \cong \triangle CBD$	4.	?

What reason can be used to prove that the triangles are congruent?

A AAS

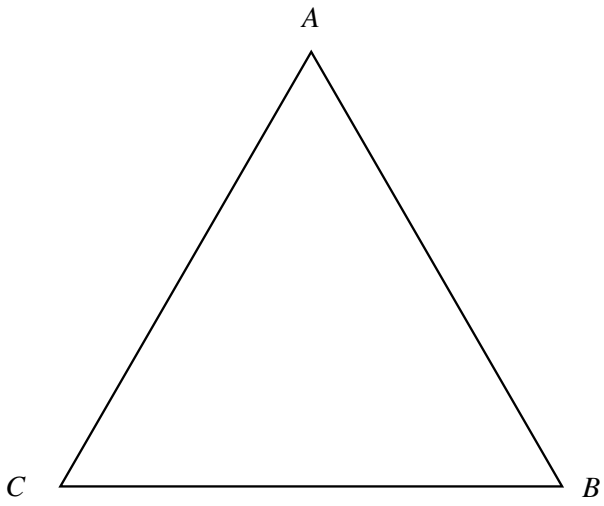
B ASA

C SAS

D SSS

CSG10068

5 **In the figure below, $AB > BC$.**



If we assume that $m\angle A = m\angle C$, it follows that $AB = BC$. This contradicts the given statement that $AB > BC$. What conclusion can be drawn from this contradiction?

A $m\angle A = m\angle B$

B $m\angle A \neq m\angle B$

C $m\angle A = m\angle C$

D $m\angle A \neq m\angle C$

CSG00524

6 ***"Two lines in a plane always intersect in exactly one point."***

Which of the following best describes a *counterexample* to the assertion above?

A coplanar lines

B parallel lines

C perpendicular lines

D intersecting lines

CSG00320

7 **Which figure can serve as a counterexample to the conjecture below?**

> If one pair of opposite sides of a quadrilateral is parallel, then the quadrilateral is a parallelogram.

A rectangle

B rhombus

C square

D trapezoid

CSG10194

8 **Given: *TRAP* is an isosceles trapezoid with diagonals $\overline{RP}$ and $\overline{TA}$. Which of the following *must* be true?**

A $\overline{RP} \perp \overline{TA}$

B $\overline{RP} \parallel \overline{TA}$

C $\overline{RP} \cong \overline{TA}$

D $\overline{RP}$ bisects $\overline{TA}$

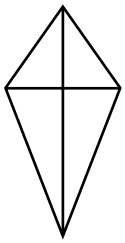
CSG00260

9 **A conditional statement is shown below.**

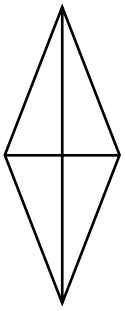
> If a quadrilateral has perpendicular diagonals, then it is a rhombus.

Which of the following is a counterexample to the statement above?

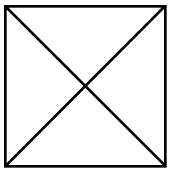
A



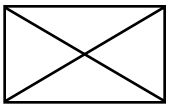
C



B



D



CSG20216

10 **Which triangles must be similar?**

A two obtuse triangles

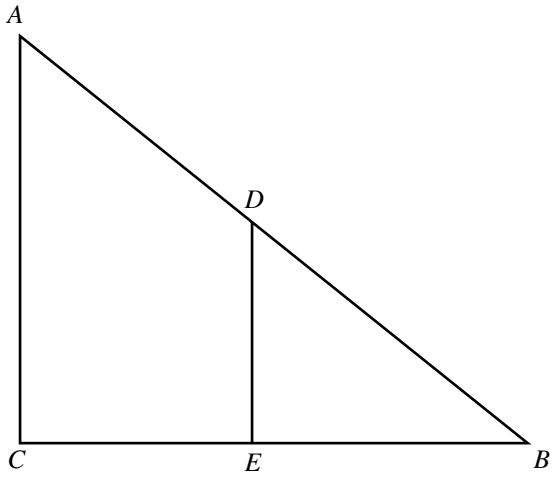
B two scalene triangles with congruent bases

C two right triangles

D two isosceles triangles with congruent vertex angles

CSG00578

11 **Which of the following facts would be sufficient to prove that triangles *ABC* and *DBE* are similar?**



A $\overline{CE}$ and $\overline{BE}$ are congruent.

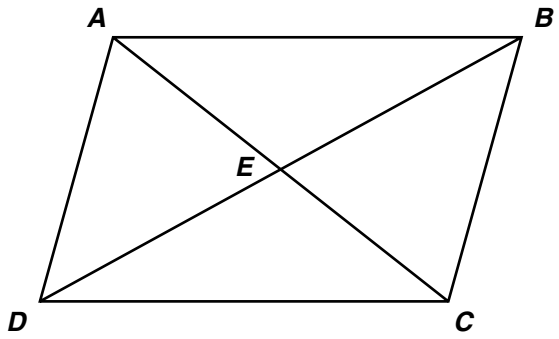
B $\angle ACE$ is a right angle.

C $\overline{AC}$ and $\overline{DE}$ are parallel.

D $\angle A$ and $\angle B$ are congruent.

CSG00544

12 **Parallelogram *ABCD* is shown below.**



Which pair of triangles can be established to be congruent to prove that $\angle DAB \cong \angle BCD$?

A $\triangle ADC$ and $\triangle BCD$

B $\triangle AED$ and $\triangle BEC$

C $\triangle DAB$ and $\triangle BCD$

D $\triangle DEC$ and $\triangle BEA$

CSG10146

13 **If $\triangle ABC$ and $\triangle XYZ$ are two triangles such that $\frac{AB}{XY} = \frac{BC}{YZ}$, which of the following would be sufficient to prove the triangles are similar?**

A $\angle A \cong \angle X$

B $\angle B \cong \angle Y$

C $\angle C \cong \angle Z$

D $\angle X \cong \angle Y$

CSG10218

14 **In parallelogram *FGHI*, diagonals $\overline{IG}$ and $\overline{FH}$ are drawn and intersect at point *M*. Which of the following statements *must* be true?**

A $\triangle FGI$ must be an obtuse triangle.

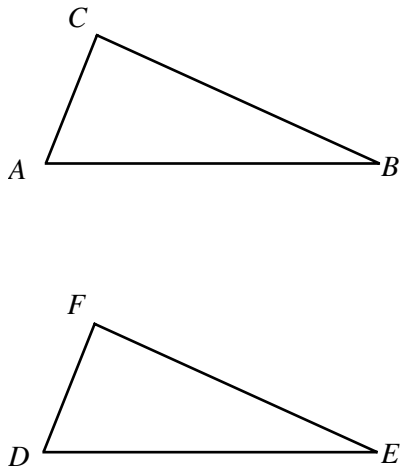
B $\triangle HIG$ must be an acute triangle.

C $\triangle FMG$ must be congruent to $\triangle HMG$.

D $\triangle GMH$ must be congruent to $\triangle IMF$.

CSG00559

15 **In the figure below, $\overline{AC} \cong \overline{DF}$ and $\angle A \cong \angle D$.**



Which additional information would be enough to prove that $\triangle ABC \cong \triangle DEF$?

A $\overline{AB} \cong \overline{DE}$

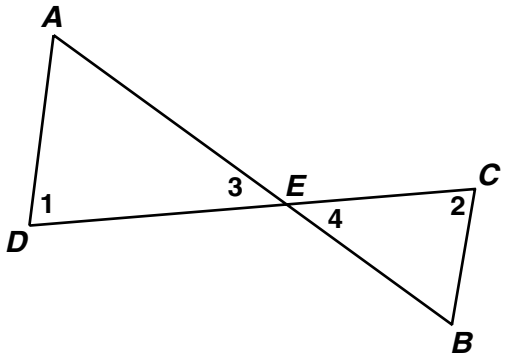
B $\overline{AB} \cong \overline{BC}$

C $\overline{BC} \cong \overline{EF}$

D $\overline{BC} \cong \overline{DE}$

CSG00517

16 Given: $\overline{AB}$ and $\overline{CD}$ intersect at point E; $\angle 1 \cong \angle 2$



Which theorem or postulate can be used to prove $\triangle AED \sim \triangle BEC$?

A AA

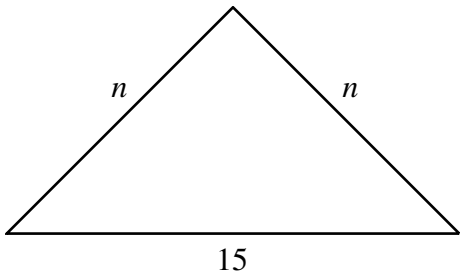
B SSS

C ASA

D SAS

CSG10074

17 In the figure below, n is a whole number. What is the *smallest* possible value for n?



A 1

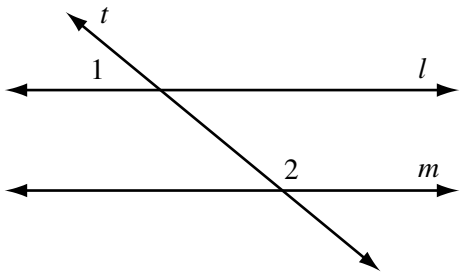
B 7

C 8

D 14

CSG00295

18 In the accompanying diagram, parallel lines l and m are cut by transversal t.



Which statement about angles 1 and 2 *must* be true?

A $\angle 1 \cong \angle 2$.

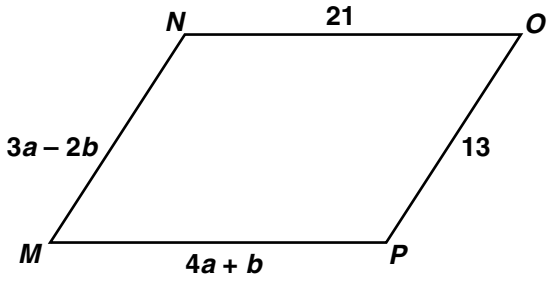
B $\angle 1$ is the complement of $\angle 2$.

C $\angle 1$ is the supplement of $\angle 2$.

D $\angle 1$ and $\angle 2$ are right angles.

CSG00579

19 What values of a and b make quadrilateral $MNOP$ a parallelogram?



A $a = 1, b = 5$

B $a = 5, b = 1$

C $a = \frac{11}{7}, b = \frac{34}{7}$

D $a = \frac{34}{7}, b = \frac{11}{7}$

CSG10163

20 **Quadrilateral *ABCD* is a parallelogram. If adjacent angles are congruent, which statement must be true?**

A Quadrilateral *ABCD* is a square.

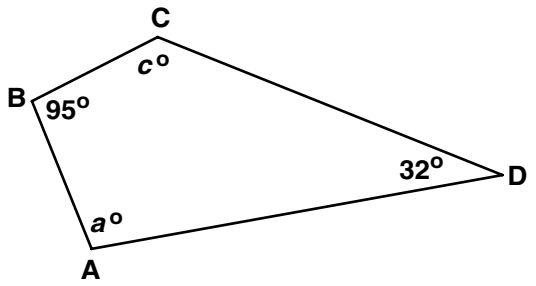
B Quadrilateral *ABCD* is a rhombus.

C Quadrilateral *ABCD* is a rectangle.

D Quadrilateral *ABCD* is an isosceles trapezoid.

CSG20048

21 **For the quadrilateral shown below, what is $m\angle a + m\angle c$?**



A 53°

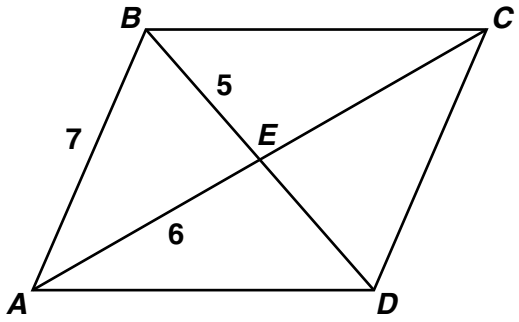
B 137°

C 180°

D 233°

CSG10162

22 **If *ABCD* is a parallelogram, what is the length of segment *BD*?**



A 10

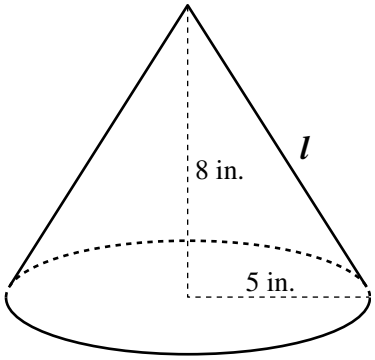
B 11

C 12

D 14

CSG20236

23 **A right circular cone has radius 5 inches and height 8 inches.**



What is the lateral area of the cone? (Lateral area of cone $= \pi rl$, where l = slant height)

A 40π sq in.

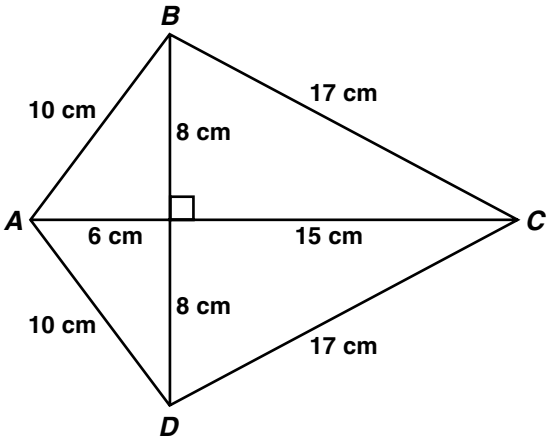
B 445π sq in.

C $5\pi\sqrt{39}$ sq in.

D $5\pi\sqrt{89}$ sq in.

CSG00053

24 **Figure *ABCD* is a kite.**



What is the area of figure *ABCD*, in square centimeters?

A 120

B 154

C 168

D 336

CSG20157

25 **If a cylindrical barrel measures 22 inches in diameter, how many inches will it roll in 8 revolutions along a smooth surface?**

A 121π in.

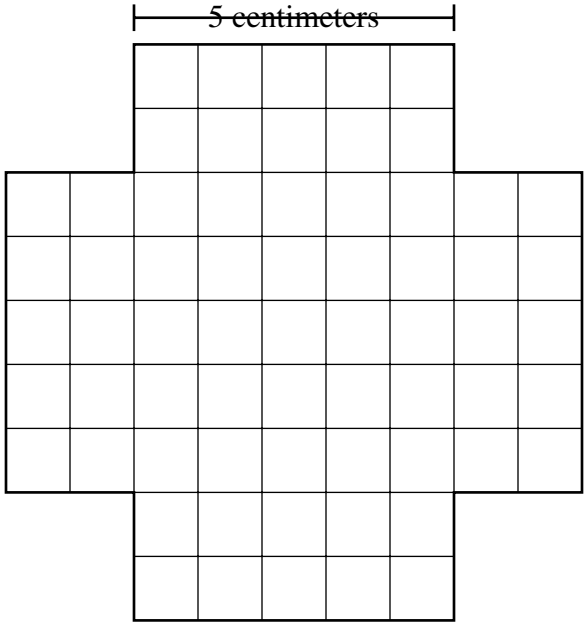
B 168π in.

C 176π in.

D 228π in.

CSG00564

26 **The four sides of this figure will be folded up and taped to make an open box.**



What will be the volume of the box?

A 50 cm^3

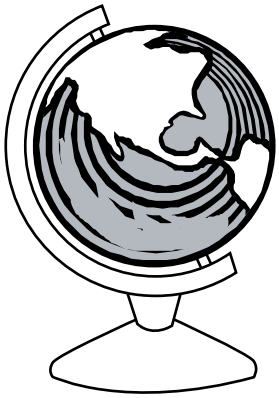
B 75 cm^3

C 100 cm^3

D 125 cm^3

CSG00299

27 **A classroom globe has a diameter of 18 inches.**



Which of the following is the approximate surface area, in square inches, of the globe? $\left(\textbf{Surface Area} = 4\pi r^2\right)$

A 113.0

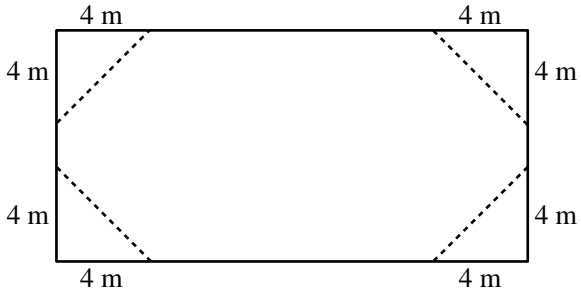
B 226.1

C 254.3

D 1017.4

CSG20238

28 **The rectangle shown below has length 20 meters and width 10 meters.**



If four triangles are removed from the rectangle as shown, what will be the area of the remaining figure?

A 136 m^2

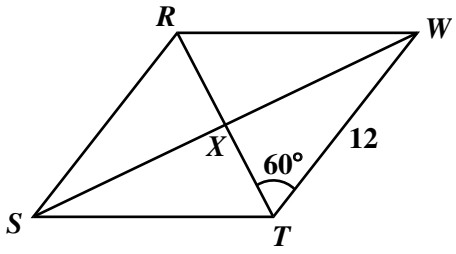
B 144 m^2

C 168 m^2

D 184 m^2

CSG00012

29 **If *RSTW* is a rhombus, what is the area of $\triangle WXT$?**



A $18\sqrt{3}$

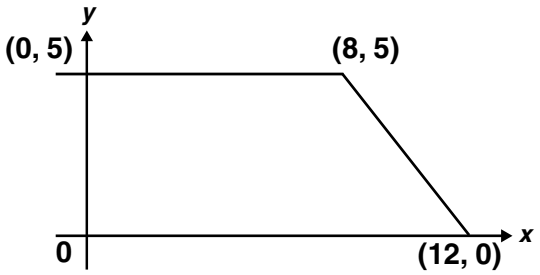
B $36\sqrt{3}$

C 36

D 48

CSG00227

30 **What is the area, in square units, of the trapezoid shown below?**



A 37.5

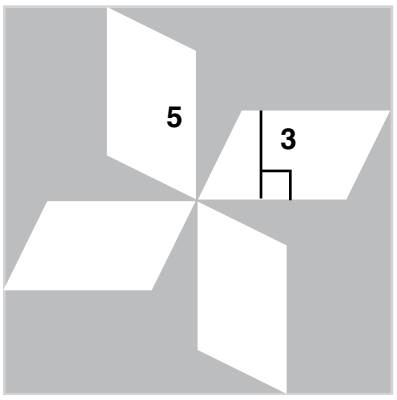
B 42.5

C 50

D 100

CSG20226

31 **The figure below is a square with four congruent parallelograms inside.**



12

What is the area, in square units, of the shaded portion?

A 60

B 84

C 114

D 129

CSG20225

32 **The perimeters of two squares are in a ratio of 4 to 9. What is the ratio between the areas of the two squares?**

A 2 to 3

B 4 to 9

C 16 to 27

D 16 to 81

CSG00013

33 **Lea made two candles in the shape of right rectangular prisms. The first candle is 15 cm high, 8 cm long, and 8 cm wide. The second candle is 5 cm higher but has the same length and width. How much additional wax was needed to make the taller candle?**

A 320 cm^3

B 640 cm^3

C 960 cm^3

D 1280 cm^3

CSG20116

34 **Two angles of a triangle have measures of 55° and 65°. Which of the following could *not* be a measure of an exterior angle of the triangle?**

A 115°

B 120°

C 125°

D 130°

CSG00571

35 **The sum of the interior angles of a polygon is the same as the sum of its exterior angles. What type of polygon is it?**

A quadrilateral

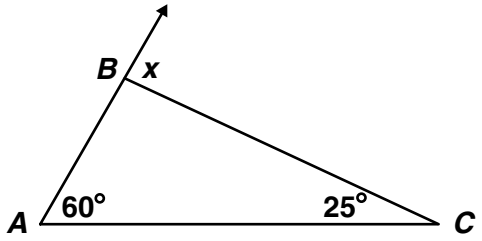
B hexagon

C octagon

D decagon

CSG00305

36 **What is $m\angle x$?**



A 35°

B 60°

C 85°

D 95°

CSG20086

37 **If the measure of an exterior angle of a regular polygon is 120°, how many sides does the polygon have?**

A 3

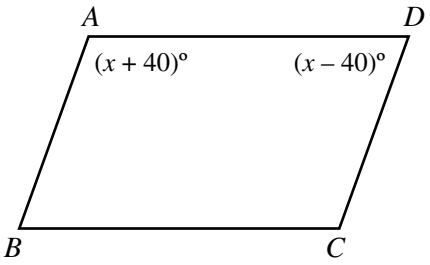
B 4

C 5

D 6

CSG20204

38 **In the figure below, $\overline{AB} \parallel \overline{CD}$.**



What is the value of x?

A 40

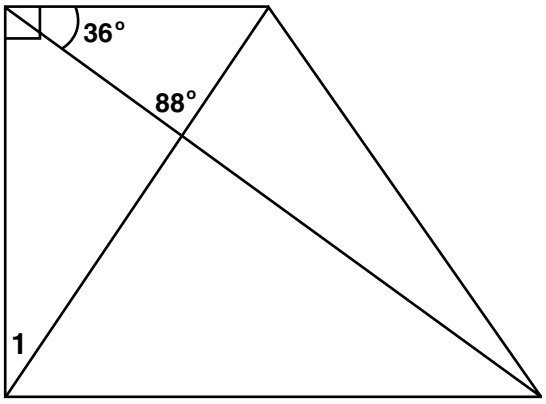
B 50

C 80

D 90

CSG00244

39 **What is $m\angle 1$?**



A 34°

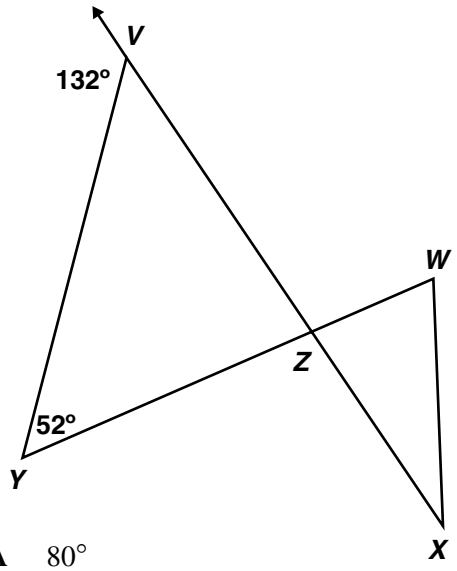
B 56°

C 64°

D 92°

CSG20179

40 **What is $m\angle WZX$?**



A 80°

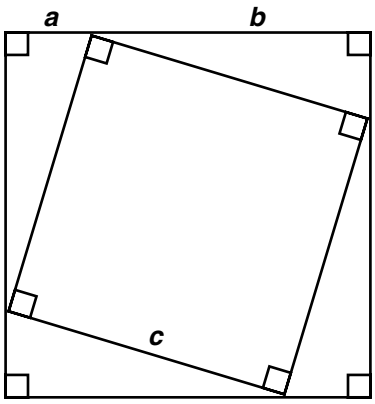
B 90°

C 100°

D 110°

CSG30022

41 **A diagram from a proof of the Pythagorean theorem is pictured below.**



Which statement would *not* be used in the proof of the Pythagorean theorem?

A The area of a triangle equals $\frac{1}{2}ab$.

B The four right triangles are congruent.

C The area of the inner square is equal to half of the area of the larger square.

D The area of the larger square is equal to the sum of the areas of the smaller square and the four congruent triangles.

CSG10192

42 **A right triangle's hypotenuse has length 5. If one leg has length 2, what is the length of the other leg?**

A 3

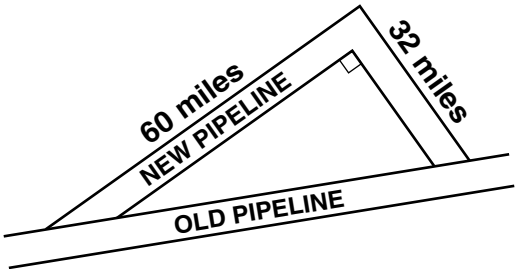
B $\sqrt{21}$

C $\sqrt{29}$

D 7

CSG00566

43 **A new pipeline is being constructed to re-route its oil flow around the exterior of a national wildlife preserve. The plan showing the old pipeline and the new route is shown below.**



About how many extra miles will the oil flow once the new route is established?

A 24

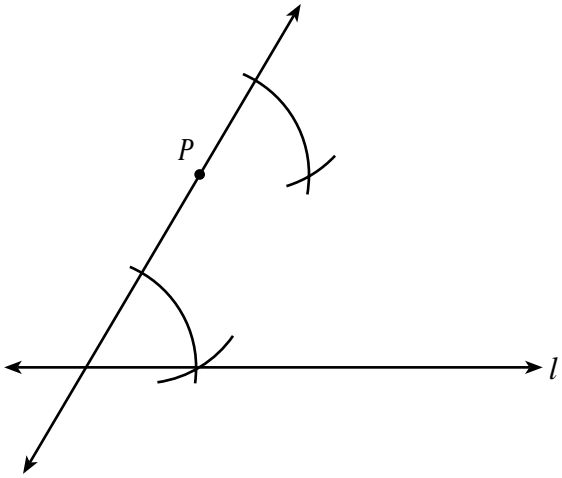
B 68

C 92

D 160

CSG10016

44 **Marsha is using a straightedge and compass to do the construction shown below.**



Which *best* describes the construction Marsha is doing?

A a line through *P* parallel to line *l*

B a line through *P* intersecting line *l*

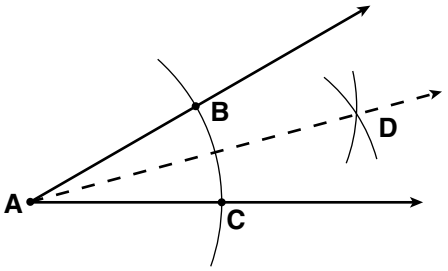
C a line through *P* congruent to line *l*

D a line through *P* perpendicular to line *l*

CSG00526

45 **Given: angle *A***

What is the first step in constructing the angle bisector of angle *A*?



A Draw ray $\overrightarrow{AD}$.

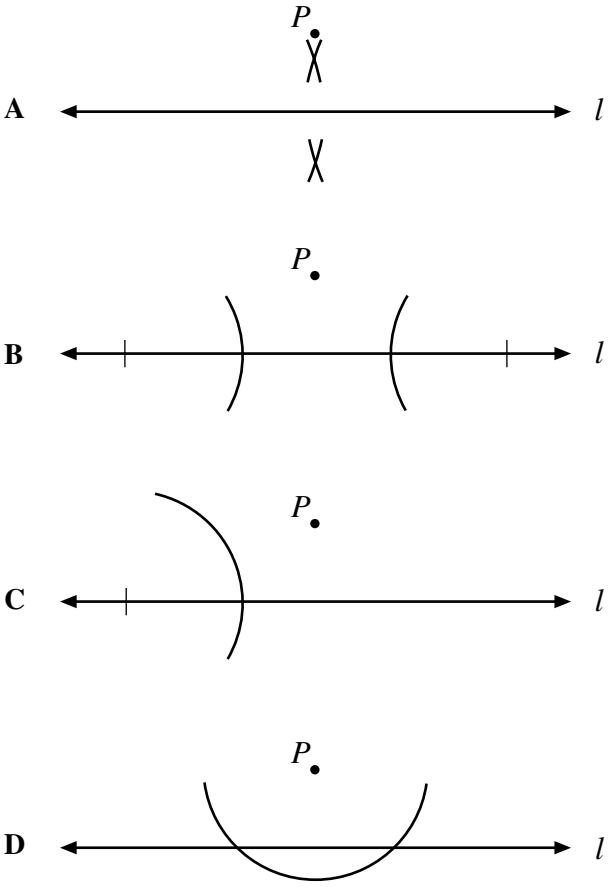
B Draw a line segment connecting points *B* and *C*.

C From points *B* and *C*, draw equal arcs that intersect at *D*.

D From point *A*, draw an arc that intersects the sides of the angle at points *B* and *C*.

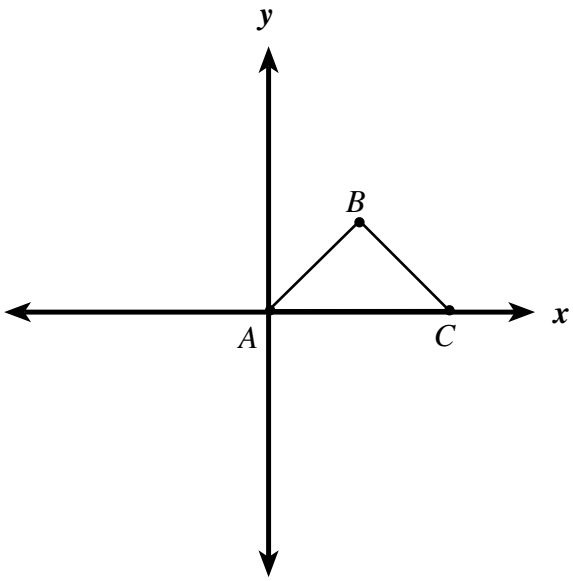
CSG10131

46 **Scott is constructing a line perpendicular to line *l* from point *P*. Which of the following should be his first step?**



CSG00308

47 **The diagram shows $\triangle ABC$.**



Which statement would prove that $\triangle ABC$ is a right triangle?

A $\left(\text{slope } \overline{AB}\right)\left(\text{slope } \overline{BC}\right) = 1$

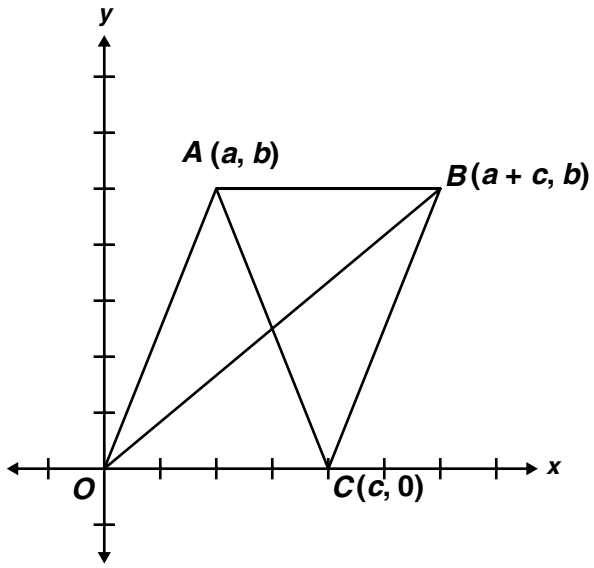
B $\left(\text{slope } \overline{AB}\right)\left(\text{slope } \overline{BC}\right) = -1$

C distance from A to B = distance from B to C

D distance from A to B = $-$ (distance from B to C)

CSG00475

48 **Figure $ABCO$ is a parallelogram.**



What are the coordinates of the point of intersection of the diagonals?

A $\left(\frac{a}{2}, \frac{b}{2}\right)$

B $\left(\frac{c}{2}, \frac{b}{2}\right)$

C $\left(\frac{a+c}{2}, \frac{b}{2}\right)$

D $\left(\frac{a+c}{2}, \frac{a+b}{2}\right)$

CSG20101

49 **What type of triangle is formed by the points $A(4,2)$, $B(6,-1)$, and $C(-1,3)$?**

A right

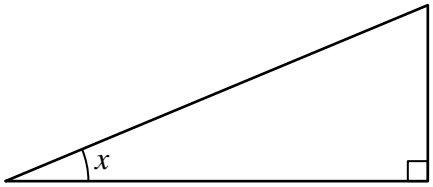
B equilateral

C isosceles

D scalene

CSG10235

50 **In the figure below, if $\sin x = \frac{5}{13}$, what are $\cos x$ and $\tan x$?**



A $\cos x = \frac{12}{13}$ and $\tan x = \frac{5}{12}$

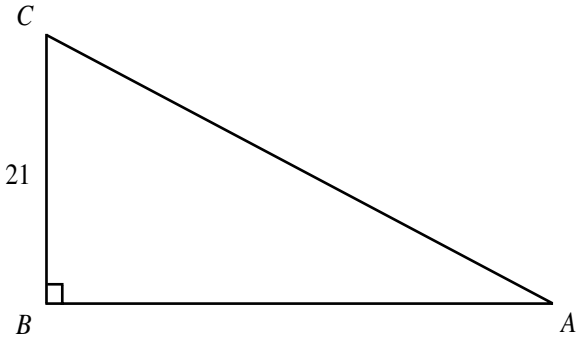
B $\cos x = \frac{12}{13}$ and $\tan x = \frac{12}{5}$

C $\cos x = \frac{13}{12}$ and $\tan x = \frac{5}{12}$

D $\cos x = \frac{13}{12}$ and $\tan x = \frac{13}{5}$

CSG00493

51 **In the figure below, $\sin A = 0.7$.**



What is the length of $\overline{AC}$?

A 14.7

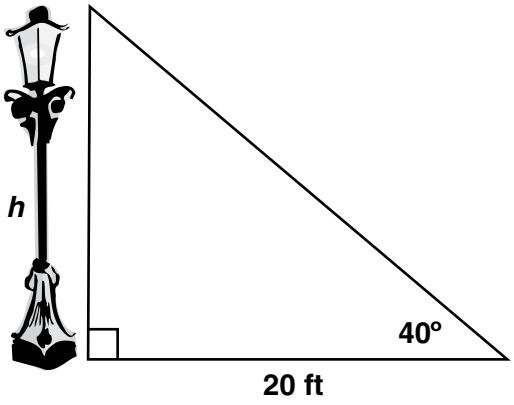
B 21.7

C 30

D 32

CSG00432

52 **Approximately how many feet tall is the streetlight?**



$\sin 40^\circ \approx 0.64$
$\cos 40^\circ \approx 0.77$
$\tan 40^\circ \approx 0.84$

A 12.8

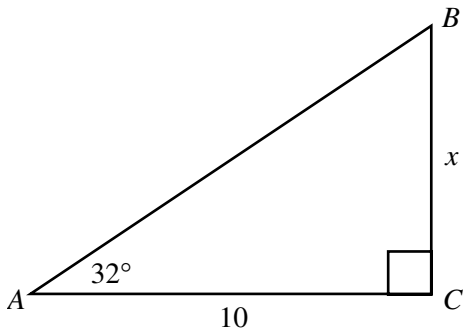
B 15.4

C 16.8

D 23.8

CSG20047

53 **In the accompanying diagram, $m\angle A = 32^\circ$ and $AC = 10$. Which equation could be used to find x in $\triangle ABC$?**



A $x = 10 \sin 32^\circ$

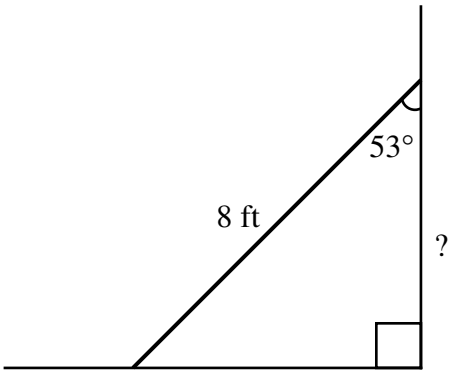
B $x = 10 \cos 32^\circ$

C $x = 10 \tan 32^\circ$

D $x = \dfrac{10}{\cos 32^\circ}$

CSG00555

54 **The diagram shows an 8-foot ladder leaning against a wall. The ladder makes a 53° angle with the wall. Which is closest to the distance up the wall the ladder reaches?**



$\sin 53° \approx 0.80$
$\cos 53° \approx 0.60$
$\tan 53° \approx 1.33$

A 3.2 ft

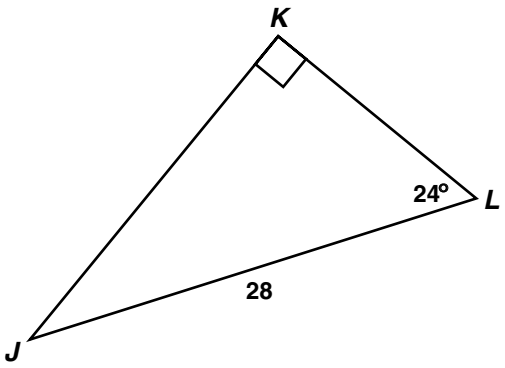
B 4.8 ft

C 6.4 ft

D 9.6 ft

CSG00342

55 **Triangle *JKL* is shown below.**



Which equation should be used to find the length of $\overline{JK}$?

A $\sin 24° = \frac{JK}{28}$

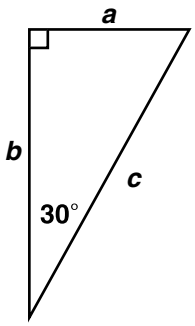
B $\sin 24° = \frac{28}{JK}$

C $\cos 24° = \frac{JK}{28}$

D $\cos 24° = \frac{28}{JK}$

CSG20031

56 **If $a = 3\sqrt{3}$ in the right triangle below, what is the value of b?**



A 9

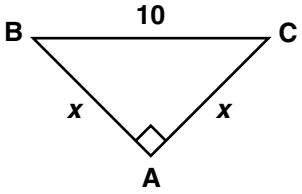
B $6\sqrt{3}$

C $12\sqrt{3}$

D 18

CSG10052

57 **What is the value of x in the triangle below?**



A 5

B $5\sqrt{2}$

C $10\sqrt{3}$

D 20

CSG10056

58 **A square is circumscribed about a circle. What is the ratio of the area of the circle to the area of the square?**

A $\frac{1}{4}$

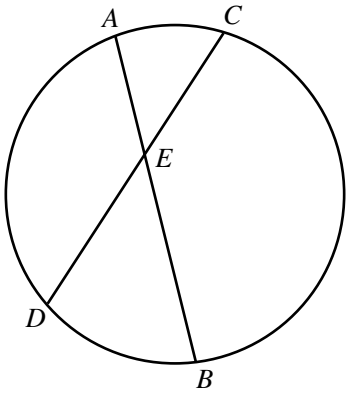
B $\frac{1}{2}$

C $\frac{2}{\pi}$

D $\frac{\pi}{4}$

CSG00585

59 **In the circle below, $\overline{AB}$ and $\overline{CD}$ are chords intersecting at E.**



If $AE = 5$, $BE = 12$, and $CE = 6$, what is the length of $\overline{DE}$?

A 7

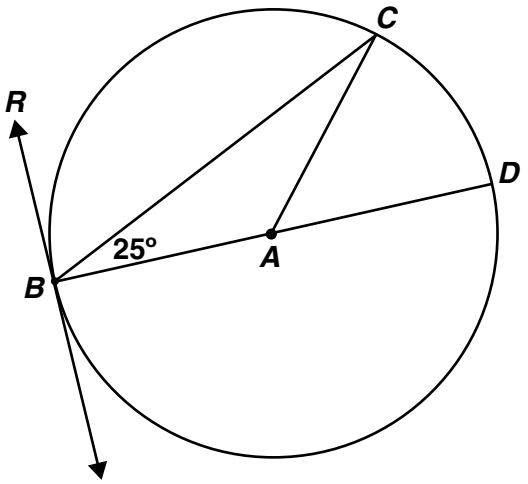
B 9

C 10

D 13

CSG00022

60 $\overleftrightarrow{RB}$ **is tangent to a circle, whose center is** A**, at point** B**.** $\overline{BD}$ **is a diameter.**



What is $m\angle CBR$**?**

A 50°

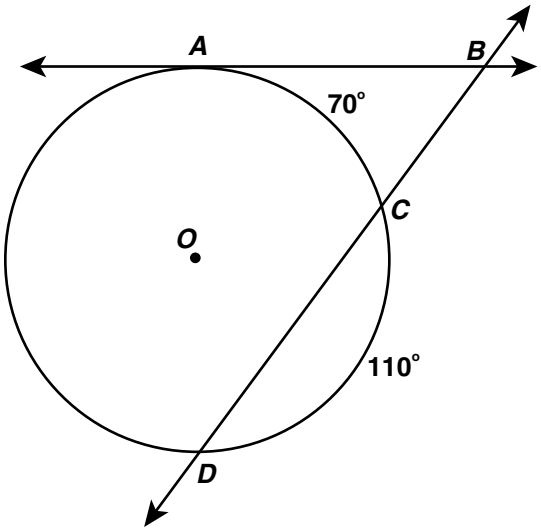
B 65°

C 90°

D 130°

CSG20186

61 **In the figure below,** $\overleftrightarrow{AB}$ **is tangent to circle** O **at point** A**, secant** $\overleftrightarrow{BD}$ **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

62 **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 $D(0, 1), E(1, 2), F(1, 3)$

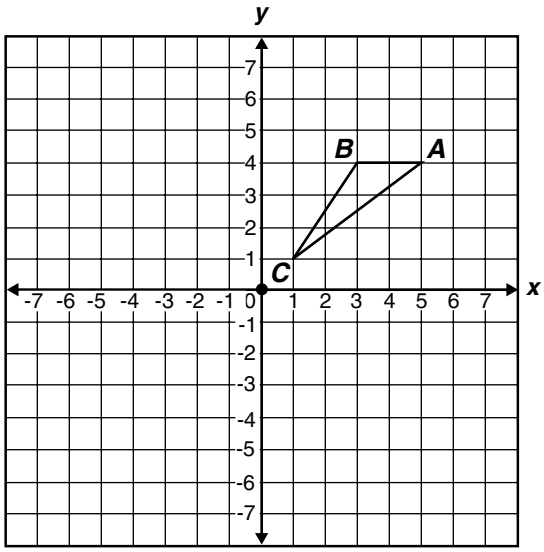
B $D(0, -1), E(0, 3), F(-2, -2)$

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

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

CSG00317

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



A $(-5, -4)$

B $(-5, 4)$

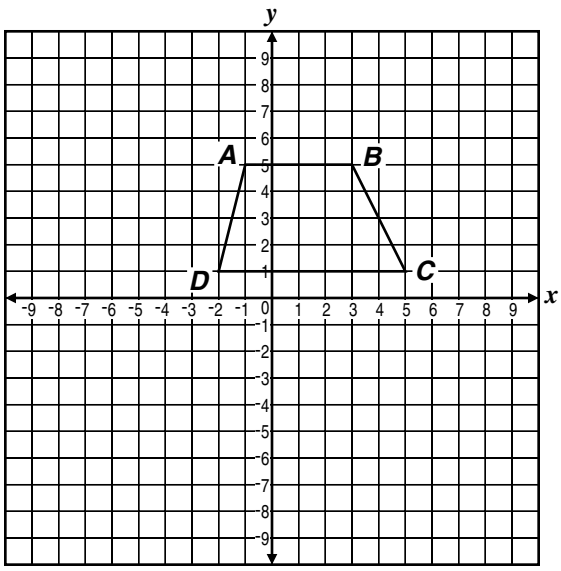
C $(-4, 5)$

D $(-4, -5)$

CSG10096

64 **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

Question Number	Correct Answer	Standard	Year of Test
1	*A*	GE1.0	2004
2	*A*	GE1.0	2005
3	*D*	GE2.0	2003
4	*D*	GE2.0	2004
5	*D*	GE2.0	2005
6	*B*	GE3.0	2003
7	*D*	GE3.0	2004
8	*C*	GE3.0	2005
9	*A*	GE3.0	2006
10	*D*	GE4.0	2003
11	*C*	GE4.0	2004
12	*C*	GE4.0	2005
13	*B*	GE4.0	2005
14	*D*	GE4.0	2006
15	*A*	GE5.0	2003
16	*A*	GE5.0	2004
17	*C*	GE6.0	2003
18	*C*	GE7.0	2003
19	*B*	GE7.0	2004
20	*C*	GE7.0	2005
21	*D*	GE7.0	2006
22	*A*	GE7.0	2006
23	*D*	GE8.0	2003
24	*C*	GE8.0	2005
25	*C*	GE8.0	2006
26	*A*	GE9.0	2006
27	*D*	GE9.0	2006
28	*C*	GE10.0	2003
29	*A*	GE10.0	2004
30	*C*	GE10.0	2005
31	*B*	GE10.0	2006
32	*D*	GE11.0	2004
33	*A*	GE11.0	2005

Question Number	Correct Answer	Standard	Year of Test
34	*D*	GE12.0	2003
35	*A*	GE12.0	2003
36	*C*	GE12.0	2005
37	*A*	GE12.0	2005
38	*D*	GE12.0	2006
39	*A*	GE13.0	2005
40	*A*	GE13.0	2006
41	*C*	GE14.0	2004
42	*B*	GE15.0	2003
43	*A*	GE15.0	2004
44	*A*	GE16.0	2003
45	*D*	GE16.0	2004
46	*D*	GE16.0	2006
47	*B*	GE17.0	2004
48	*C*	GE17.0	2005
49	*D*	GE17.0	2006
50	*A*	GE18.0	2003
51	*C*	GE18.0	2004
52	*C*	GE18.0	2006
53	*C*	GE19.0	2003
54	*B*	GE19.0	2005
55	*A*	GE19.0	2006
56	*A*	GE20.0	2004
57	*B*	GE20.0	2005
58	*D*	GE21.0	2003
59	*C*	GE21.0	2004
60	*B*	GE21.0	2005
61	*C*	GE21.0	2006
62	*D*	GE22.0	2003
63	*A*	GE22.0	2004
64	*D*	GE22.0	2006