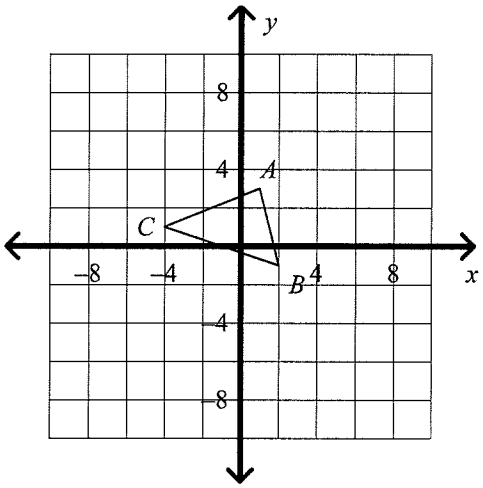
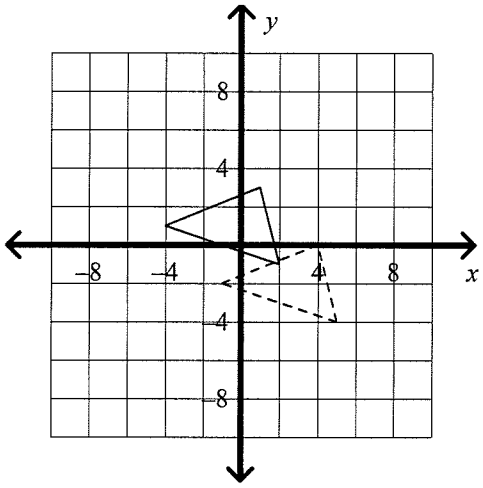
Name: _____ **Class:** _____ **Date:** _____ **ID: A**

Geometry C Final Exam Review 2016-17

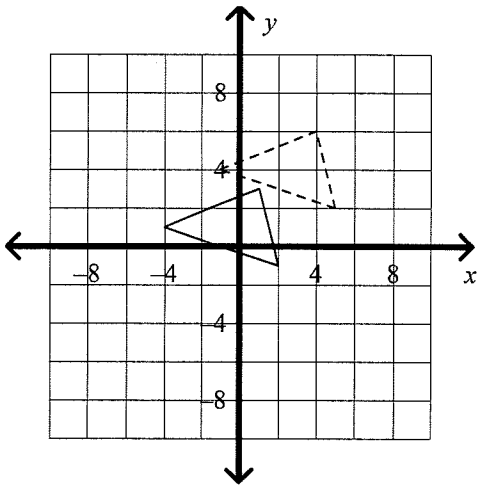
____ 1. Which graph shows $T_{<-3,3>}(\Delta ABC)$?



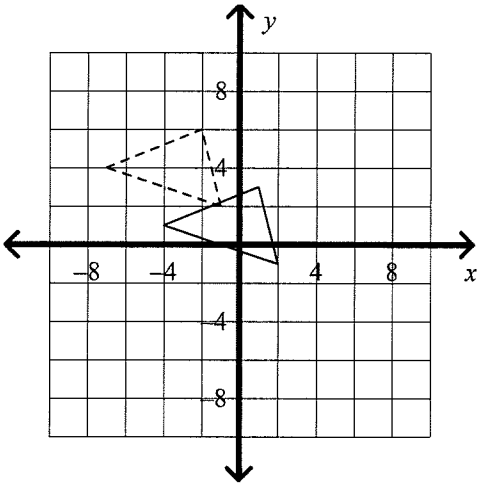
A.



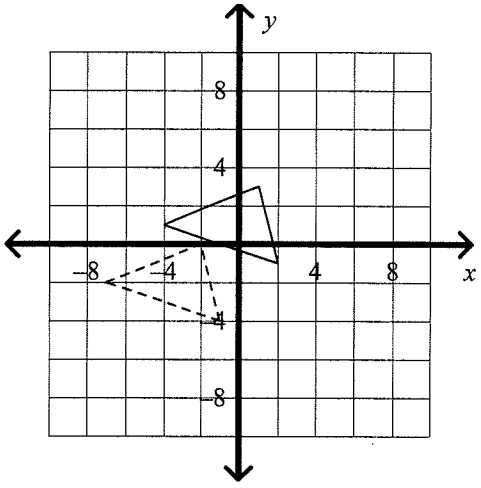
C.



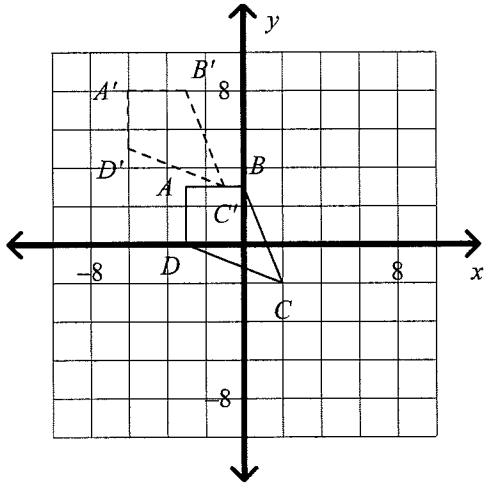
B.



D.



____ 2. What is a rule that describes the translation $ABCD \rightarrow A'B'C'D'$?



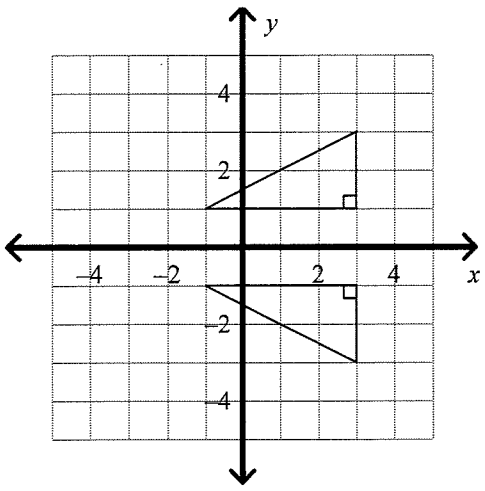
A. $T_{<3,5>}(ABCD)$
B. $T_{<3,-5>}(ABCD)$
C. $T_{<5,-3>}(ABCD)$
D. $T_{<-3,5>}(ABCD)$

____ 3. The vertices of a triangle are $P(5, 2)$, $Q(-4, 6)$, and $R(-7, 3)$. Name the vertices of $R_{y=x}(\Delta PQR)$.

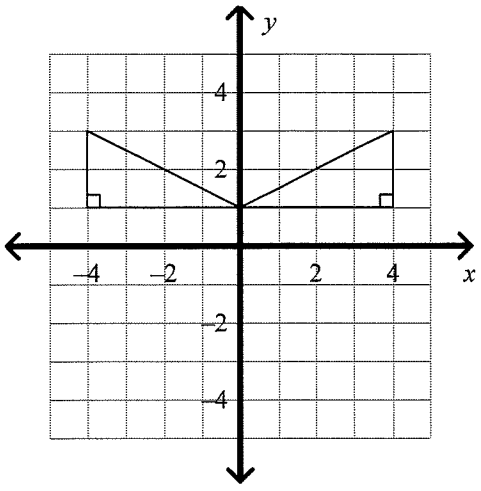
A. $P'(2, 5), Q'(6, -4), R'(3, -7)$
B. $P'(-2, -5), Q'(-6, 4), R'(-3, 7)$
C. $P'(2, -5), Q'(6, 4), R'(3, 7)$
D. $P'(-2, 5), Q'(-6, -4), R'(-3, -7)$

____ 4. Which graph shows a triangle and its reflection image over the x-axis?

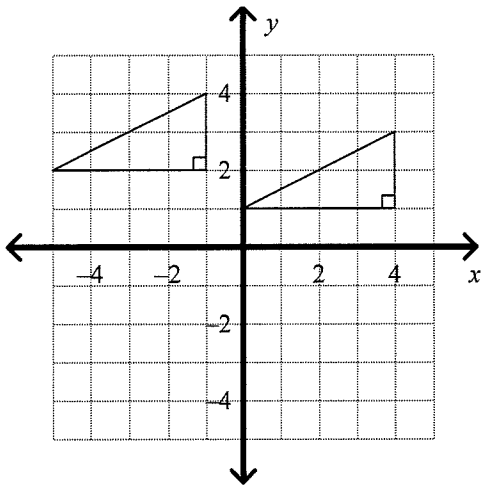
A.



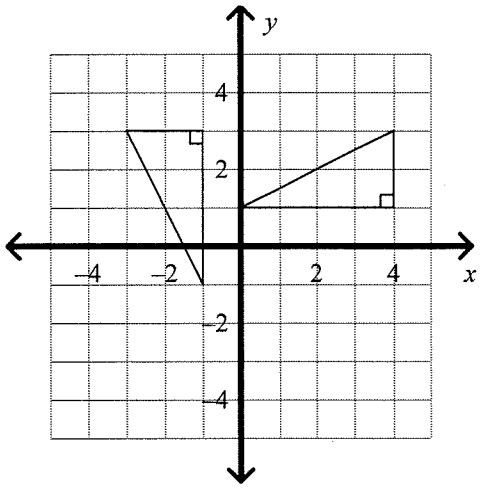
C.



B.



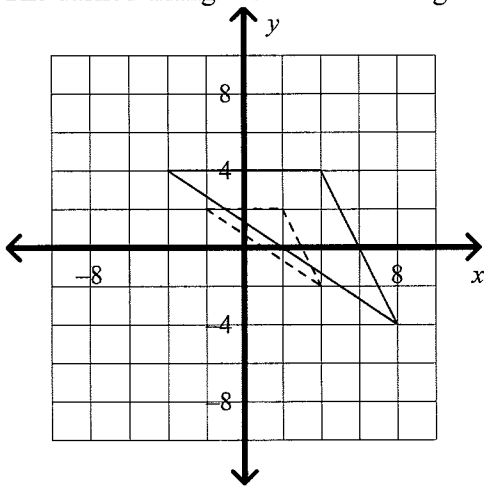
D.



____ 5. A carnival ride is drawn on a coordinate plane so that the first car is located at the point $(60, 0)$. What are the coordinates of the first car after a rotation of 270° about the origin?

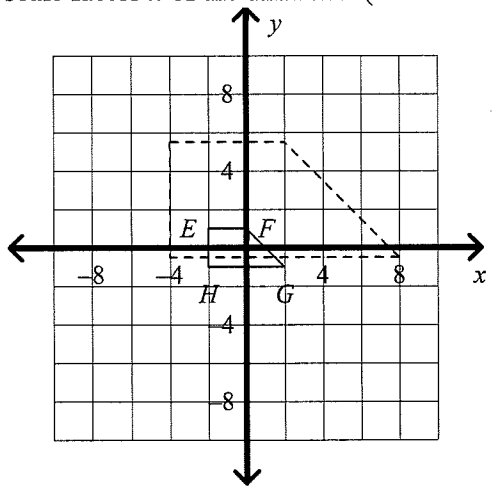
A. $(0, -60)$ B. $(-30, -30)$ C. $(0, 60)$ D. $(-60, 0)$

____ 6. The dashed triangle is a dilation image of the solid triangle. What is the scale factor?



A. $\frac{2}{3}$ B. 2 C. $\frac{1}{2}$ D. $\frac{1}{4}$

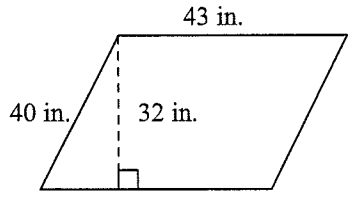
____ 7. The dashed-lined figure is a dilation image of *EFGH*. Is $D_{(k,H)}$ an enlargement or a reduction? What is the scale factor n of the dilation? (Note that the axes are labeled by 2's)



A. $k = 3$; reduction
B. $k = 6$; enlargement
C. $k = 3$; enlargement
D. $k = \frac{1}{3}$; reduction

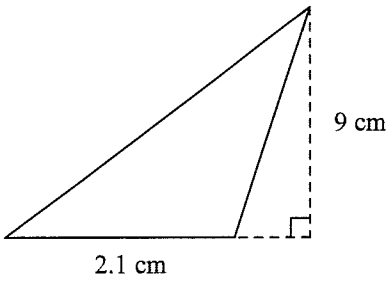
Find the area. The figure is not drawn to scale.

____ 8.



A. 1376 in.^{2} B. 1720 in.^{2} C. 150 in.^{2} D. 75 in.^{2}

____ 9.



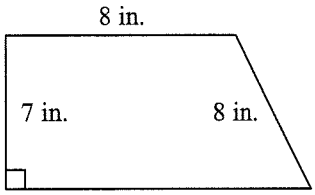
A. 9.45 cm^2 B. 11.1 cm^2 C. 37.8 cm^2 D. 18.9 cm^2

____ 10. The area of a parallelogram is 150 cm^2 and the height is 25 cm. Find the base.

A. 175 cm B. 125 cm C. 3,750 cm^2 D. 6 cm

Find the area of the trapezoid.

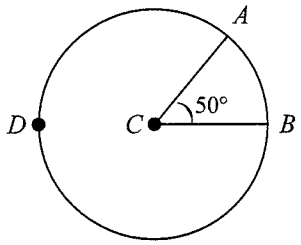
____ 11.



Not drawn to scale

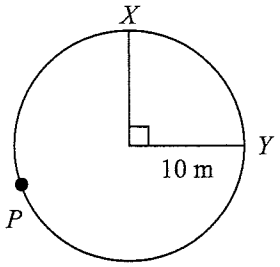
A. 80 $in.^2$ B. 77.2 $in.^2$ C. 70 $in.^2$ D. 75 $in.^2$

____ 12. Name the major arc and find its measure.



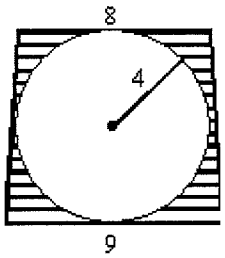
A. $\overset{\frown}{BDA}$; 50 B. $\overset{\frown}{AB}$; 310 C. $\overset{\frown}{BDA}$; 310 D. $\overset{\frown}{AB}$; 50

____ 13. Find the length of $\overset{\frown}{YPX}$. Leave your answer in terms of π.



A. 47.1 m B. 15.7 m C. 94.2 m D. 2827.4 m

____ 14. Find the area of the shaded portion of the figure. Dimensions are in feet. Leave your answer in terms of π. The figure is not drawn to scale.

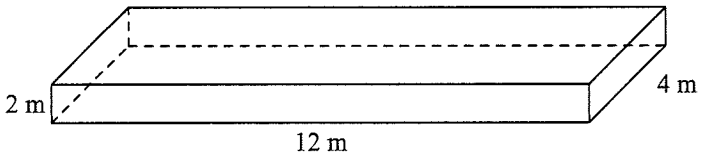


A. 21.7 ft^2 B. 17.7 ft^2 C. 42.9 ft^2 D. none of these

____ 15. Find the area of a sector with a central angle of 190° and a diameter of 5.8 cm. Round to the nearest tenth.
A. 55.8 cm^2 B. 13.9 cm^2 C. 2.4 cm^2 D. 6.1 cm^2

Use formulas to find the surface area of the given prism. Round your answer to the nearest whole number.

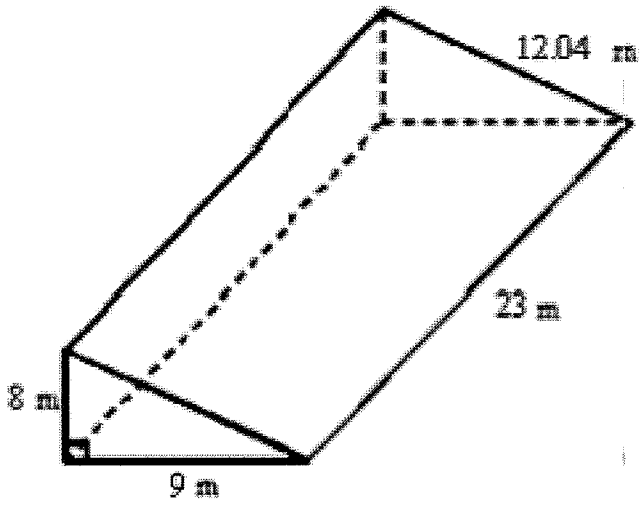
____ 16.



Not drawn to scale

A. 160 m^2
B. 112 m^2
C. 64 m^2
D. 144 m^2

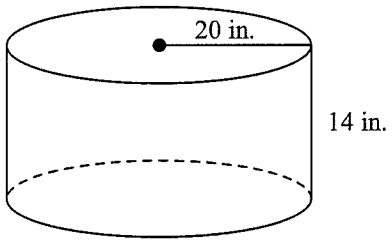
____ 17. 17. Find the total surface area of the triangular prism.



Not drawn to scale

A. 771 m^2
C. 828 m^2
B. 667.9 m^2
D. 739.9 m^2

____ 18. Find the surface area of the cylinder to the nearest whole number.



Not drawn to scale

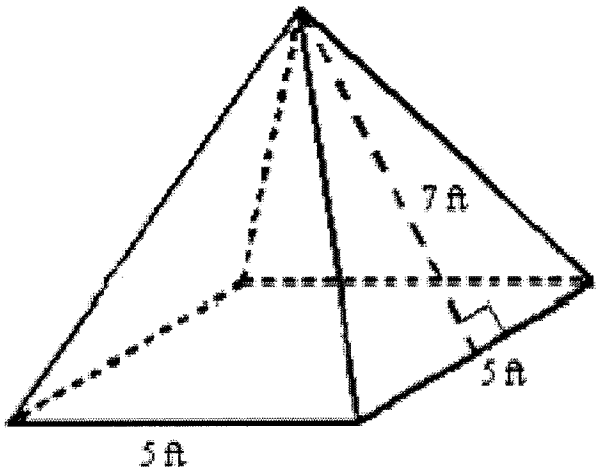
A. 15579 $in.^2$
B. 1759 $in.^2$
C. 5777 $in.^2$
D. 4273 $in.^2$

____ 19. Allison is planning to cover the **lateral area** of a large cylindrical garbage can with decorative fabric for a theme party. The can has a diameter of 3 feet and a height of 3.5 feet. How much fabric does she need? Round to the nearest square foot.

A. 66 ft^2
B. 61 ft^2
C. 33 ft^2
D. 123 ft^2

Find the surface area of the regular pyramid shown to the nearest whole number.

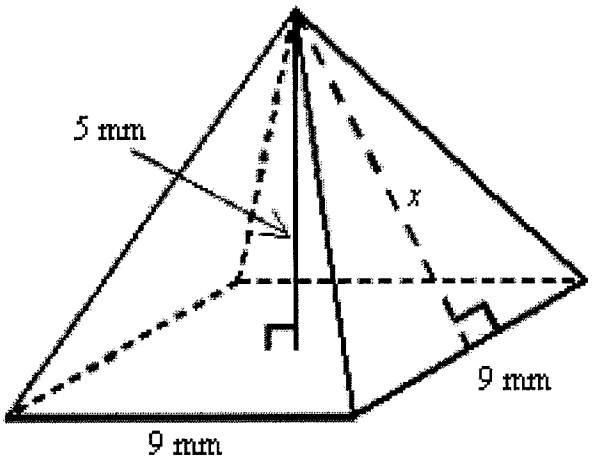
____ 20.



Not drawn to scale

A. 115 ft^2 B. 58.3 ft^2 C. 175 ft^2 D. 95 ft^2

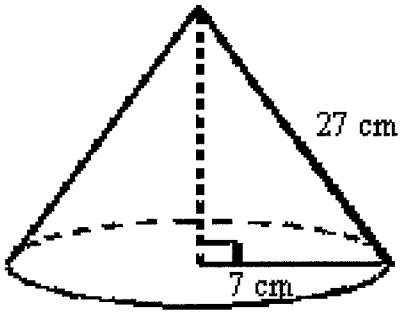
____ 21. Find the slant height x of the pyramid shown, to the nearest tenth.



Not drawn to scale

A. 6.7 mm B. 7.8 mm C. 8.9 mm D. 3.7 mm

____ 22. Find the surface area of the cone to the nearest tenth.

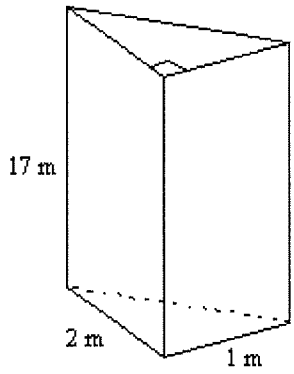


Not drawn to scale

A. 622 cm^2 B. 51 cm^2 C. 1385 cm^2 D. 747 cm^2

Find the volume of the given prism. Round to the nearest tenth if necessary.

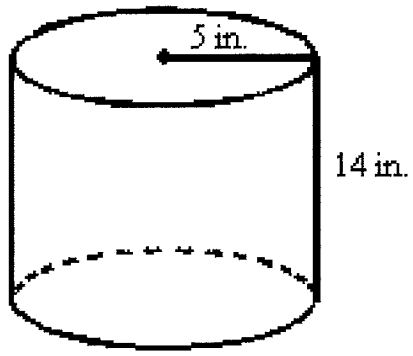
____ 23.



A. 17 m^3 B. 1 m^3 C. 8.5 m^3 D. 34 m^3

Find the volume of the cylinder in terms of π.

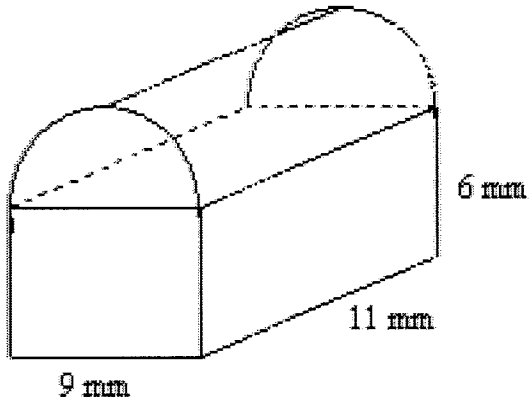
____ 24.



Not drawn to scale

A. 1099.6 in.^{3} B. 219.9 in.^{3} C. 1627.3 in.^{3} D. 791.7 in.^{3}

____ 25. Find the volume of the composite space figure to the nearest whole number.

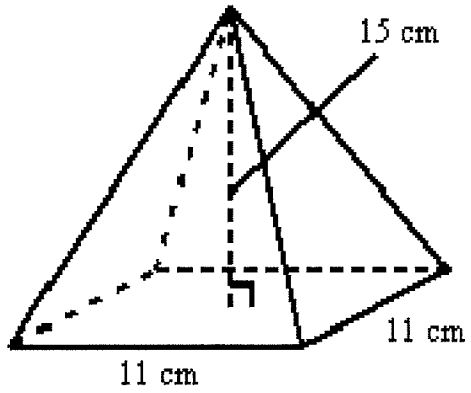


Not drawn to scale

A. 1293.8 mm^3 B. 699.8 mm^3 C. 943 mm^3 D. 591 mm^3

Find the volume of the square pyramid shown. Round to the nearest tenth if necessary.

____ 26.

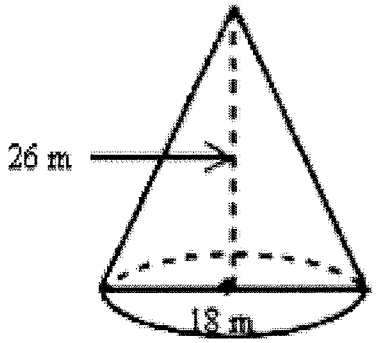


Not drawn to scale

A. 1815 cm^3 B. 605 cm^3 C. 660 cm^3 D. 220 cm^3

Find the volume of the right cone shown as a decimal rounded to the nearest tenth.

____ 27.



Not drawn to scale

A. 156 m^3 B. 2205.4 m^3 C. 2808 m^3 D. 8424 m^3

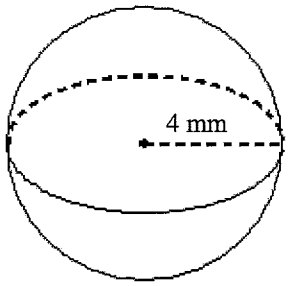
Find the surface area of the sphere with the given dimension. Leave your answer in terms of π.

____ 28. radius of 20 m

A. 628 m^2 B. 5026.5 m^2 C. 1256 m^2 D. 2513.3 m^2

Find the volume of the sphere shown. Give each answer rounded to the nearest cubic unit.

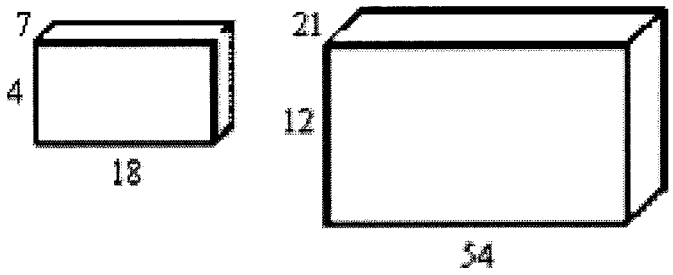
____ 29.



A. 67 mm^3 B. 134 mm^3 C. 268 mm^3 D. 201 mm^3

Are the two figures similar? If so, give the scale factor of the smaller figure to the larger figure.

____ 30.



Not drawn to scale

A. yes; $\frac{1}{3}$ B. yes; $\frac{1}{2}$ C. yes; $\frac{1}{5}$ D. no

____ 31. Find the scale factor of a prism with the surface area of 100 ft^2 to a similar prism with the surface area of 361 ft^2.

A. 10 : 19 B. 6859 : 1000 C. 19 : 10 D. 1000 : 6859

____ 32. If the scale factor of two similar solids is 4 : 13, what is the ratio of their corresponding areas? What is the ratio of their corresponding volumes?

A. The ratio of their corresponding areas is 4 : 169.
The ratio of their corresponding volumes is 4 : 2197.

B. The ratio of their corresponding areas is 64 : 2197.
The ratio of their corresponding volumes is 16 : 169.

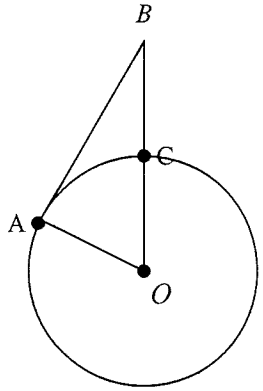
C. The ratio of their corresponding areas is 8 : 26.
The ratio of their corresponding volumes is 12 : 39.

D. The ratio of their corresponding areas is 16 : 169.
The ratio of their corresponding volumes is 64 : 2197.

____ 33. The surface area of Solid A is 675 m^2 and the surface area of Solid B is 432 m^2. If the volume of Solid B is 960 m^3, find the volume of Solid A.

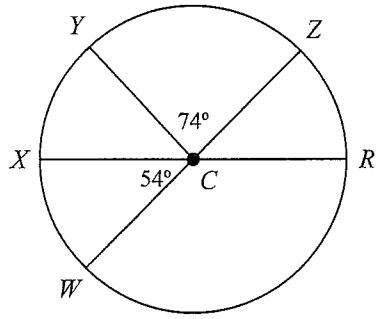
A. 1500 yd^3 B. 1875 yd^3 C. 1200 yd^3 D. 1000 yd^3

____ 34. $\overline{AB}$ is tangent to $\odot O$. If $AO = 40$ and $BC = 45$, what is AB?
The diagram is not to scale.



A. 75 B. 115 C. 90 D. 85

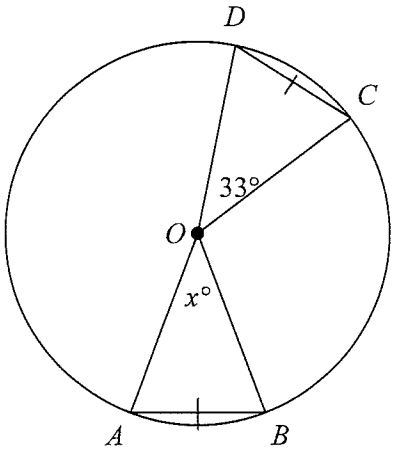
____ 35. $\overline{WZ}$ and $\overline{XR}$ are diameters. Find the measure of $\overset{\frown}{ZWX}$. (The figure is not drawn to scale.)



A. 52 B. 254 C. 234 D. 308

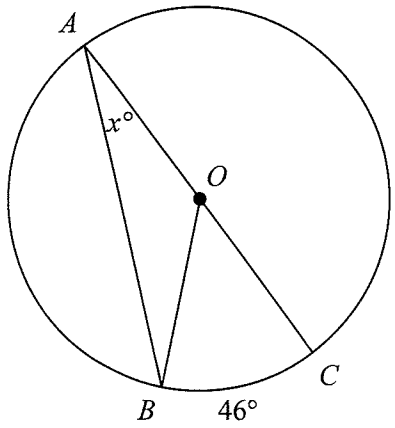
Find the value of *x*. *O* is the center of the circle.

____ 36.



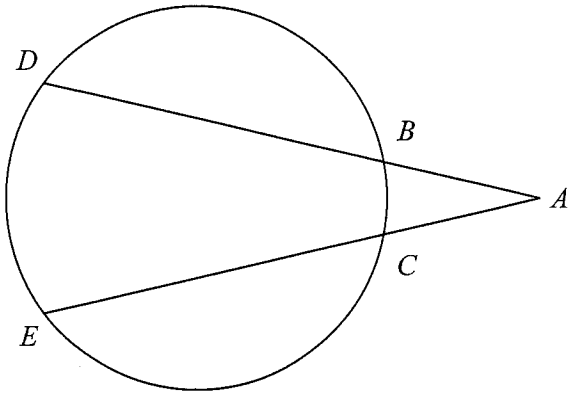
A. 57 B. 16.5 C. 33 D. 114

____ 37. Find x in circle O. (The figure is not drawn to scale.)



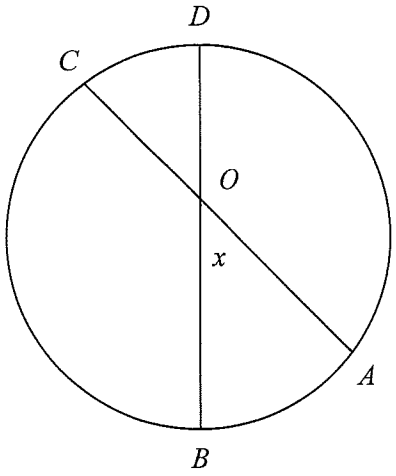
A. 23 B. 44 C. 92 D. 46

____ 38. $\overset{\frown}{mDE} = 109$ and $\overset{\frown}{mBC} = 70$. Find $m\angle A$. (The figure is not drawn to scale.)



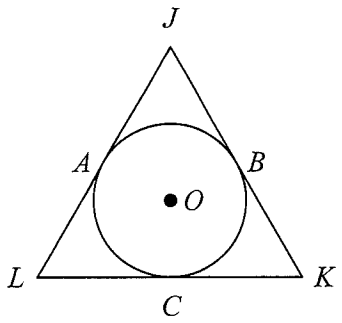
A. 74 B. 39 C. 19.5 D. 89.5

____ 39. Find the value of x for $m\overset{\frown}{AB} = 28$ and $m\overset{\frown}{CD} = 32$. (The figure is not drawn to scale.)



A. 30 B. 4 C. 44 D. 60

____ 40. $\overline{JK}$, $\overline{KL}$, and $\overline{LJ}$ are all tangent to circle O (not drawn to scale), and $\overline{JK} \cong \overline{LJ}$. $JA = 9$, $AL = 10$. Find the perimeter of ΔJKL.



A. 58 B. 56 C. 38 D. 19

Geometry C Final Exam Review 2016-17
Answer Section

1. ANS: B PTS: 1 DIF: L3 REF: 9-1 Translations
   OBJ: 9-1.2 To find translation images of figures
   NAT: CC G.CO.2| CC G.CO.4| CC G.CO.5| CC G.CO.6| G.2.b| G.2.c| G.2.d
   STA: G3.1.1| G3.1.2 TOP: 9-1 Problem 3 Finding the Image of a Translation
   KEY: translation | transformation | image | preimage
2. ANS: D PTS: 1 DIF: L3 REF: 9-1 Translations
   OBJ: 9-1.2 To find translation images of figures
   NAT: CC G.CO.2| CC G.CO.4| CC G.CO.5| CC G.CO.6| G.2.b| G.2.c| G.2.d
   STA: G3.1.1| G3.1.2 TOP: 9-1 Problem 4 Writing a Rule to Describe a Translation
   KEY: translation
3. ANS: A PTS: 1 DIF: L3 REF: 9-2 Reflections
   OBJ: 9-2.1 To find reflection images of figures
   NAT: CC G.CO.2| CC G.CO.4| CC G.CO.5| CC G.CO.6| G.2.b| G.2.c| G.2.d
   STA: G3.1.1 TOP: 9-2 Problem 1 Reflecting a Point Across a Line
   KEY: reflection | line of reflection
4. ANS: A PTS: 1 DIF: L3 REF: 9-2 Reflections
   OBJ: 9-2.1 To find reflection images of figures
   NAT: CC G.CO.2| CC G.CO.4| CC G.CO.5| CC G.CO.6| G.2.b| G.2.c| G.2.d
   STA: G3.1.1 TOP: 9-2 Problem 2 Graphing a Reflection Image
   KEY: reflection | line of reflection
5. ANS: A PTS: 1 DIF: L3 REF: 9-3 Rotations
   OBJ: 9-3.1 To draw and identify rotation images of figures
   NAT: CC G.CO.2| CC G.CO.4| CC G.CO.5| CC G.CO.6| G.2.b| G.2.c| G.2.d
   STA: G3.1.1 TOP: 9-3 Problem 2 Drawing Rotations in a Coordinate Plane
   KEY: rotation | center of rotation | angle of rotation
6. ANS: C PTS: 1 DIF: L3 REF: 9-6 Dilations
   OBJ: 9-6.1 To understand dilation images of figures NAT: CC G.CO.2| G.2.c| G.2.d
   STA: G3.1.1| G3.2.1| G3.2.2 TOP: 9-6 Problem 1 Finding a Scale Factor
   KEY: dilation | reduction | scale factor
7. ANS: C PTS: 1 DIF: L3 REF: 9-6 Dilations
   OBJ: 9-6.1 To understand dilation images of figures NAT: CC G.CO.2| G.2.c| G.2.d
   STA: G3.1.1| G3.2.1| G3.2.2 TOP: 9-6 Problem 1 Finding a Scale Factor
   KEY: dilation | enlargement | scale factor
8. ANS: A PTS: 1 DIF: L3
   REF: 10-1 Areas of Parallelograms and Triangles
   OBJ: 10-1.1 To find the area of parallelograms and triangles
   NAT: CC G.GPE.7| CC G.MG.1| N.3.c| N.3.f| M.1.c| M.1.f| A.4.e
   STA: G1.2.2| G1.5.1| G1.5.2| G2.1.1| G2.1.2
   TOP: 10-1 Problem 1 Finding the Area of a Parallelogram KEY: area | parallelogram | base | height
9. ANS: A PTS: 1 DIF: L3
   REF: 10-1 Areas of Parallelograms and Triangles
   OBJ: 10-1.1 To find the area of parallelograms and triangles
   NAT: CC G.GPE.7| CC G.MG.1| N.3.c| N.3.f| M.1.c| M.1.f| A.4.e
   STA: G1.2.2| G1.5.1| G1.5.2| G2.1.1| G2.1.2
   TOP: 10-1 Problem 3 Finding the Area of a Triangle KEY: triangle | area

10. ANS: D PTS: 1 DIF: L3
REF: 10-1 Areas of Parallelograms and Triangles
OBJ: 10-1.1 To find the area of parallelograms and triangles
NAT: CC G.GPE.7| CC G.MG.1| N.3.c| N.3.f| M.1.c| M.1.f| A.4.e
STA: G1.2.2| G1.5.1| G1.5.2| G2.1.1| G2.1.2
TOP: 10-1 Problem 2 Finding a Missing Dimension KEY: area | base | height | parallelogram

11. ANS: C PTS: 1 DIF: L3
REF: 10-2 Areas of Trapezoids, Rhombuses, and Kites
OBJ: 10-2.1 To find the area of a trapezoid, rhombus, or kite NAT: CC G.MG.1
TOP: 10-2 Problem 1 Area of a Trapezoid KEY: trapezoid | area

12. ANS: C PTS: 1 DIF: L3 REF: 10-6 Circles and Arcs
OBJ: 10-6.1 To find the measures of central angles and arcs
NAT: CC G.CO.1| CC G.C.1| CC G.C.2| CC G.C.5 STA: G1.6.4
TOP: 10-6 Problem 2 Finding the Measures of Arcs KEY: major arc | measure of an arc | arc

13. ANS: A PTS: 1 DIF: L3 REF: 10-6 Circles and Arcs
OBJ: 10-6.2 To find the circumference and arc length
NAT: CC G.CO.1| CC G.C.1| CC G.C.2| CC G.C.5 STA: G1.6.4
TOP: 10-6 Problem 4 Finding Arc Length KEY: arc | circumference

14. ANS: B PTS: 1 DIF: L4 REF: 10-7 Areas of Circles and Sectors
OBJ: 10-7.1 To find the areas of circles, sectors, and segments of circles
NAT: CC G.C.5 TOP: 10-7 Problem 1 Finding the Area of a Circle
KEY: area of a circle | radius

15. ANS: B PTS: 1 DIF: L3 REF: 10-7 Areas of Circles and Sectors
OBJ: 10-7.1 To find the areas of circles, sectors, and segments of circles
NAT: CC G.C.5 TOP: 10-7 Problem 2 Finding the Area of a Sector of a Circle
KEY: sector | circle | area | central angle

16. ANS: C PTS: 1 DIF: L2
REF: 11-2 Surface Areas of Prisms and Cylinders
OBJ: 11-2.1 To find the surface area of a prism and a cylinder
NAT: CC G.MG.1| N.3.c| N.3.f| N.5.e| M.1.h| A.4.f STA: G1.8.1
TOP: 11-2 Problem 2 Using Formulas to Find Surface Area of a Prism
KEY: surface area formulas | lateral area | surface area | prism | surface area of a prism

17. ANS: D PTS: 1 DIF: L4
REF: 11-2 Surface Areas of Prisms and Cylinders
OBJ: 11-2.1 To find the surface area of a prism and a cylinder
NAT: CC G.MG.1| N.3.c| N.3.f| N.5.e| M.1.h| A.4.f STA: G1.8.1
TOP: 11-2 Problem 2 Using Formulas to Find Surface Area of a Prism
KEY: surface area formulas | lateral area | surface area | prism | surface area of a prism

18. ANS: D PTS: 1 DIF: L4
REF: 11-2 Surface Areas of Prisms and Cylinders
OBJ: 11-2.1 To find the surface area of a prism and a cylinder
NAT: CC G.MG.1| N.3.c| N.3.f| N.5.e| M.1.h| A.4.f STA: G1.8.1
TOP: 11-2 Problem 3 Finding Surface Area of a Cylinder
KEY: surface area of a cylinder | cylinder | surface area formulas | surface area

19. ANS: C PTS: 1 DIF: L3
REF: 11-2 Surface Areas of Prisms and Cylinders
OBJ: 11-2.1 To find the surface area of a prism and a cylinder
NAT: CC G.MG.1| N.3.c| N.3.f| N.5.e| M.1.h| A.4.f STA: G1.8.1
TOP: 11-2 Problem 4 Finding Lateral Area of a Cylinder
KEY: cylinder | lateral area of a cylinder | surface area formulas | word problem | problem solving

20. ANS: D PTS: 1 DIF: L3
REF: 11-3 Surface Areas of Pyramids and Cones
OBJ: 11-3.1 To find the surface area of a pyramid and a cone
NAT: CC G.MG.1| N.3.c| N.3.f| N.5.e| M.1.h| A.4.f STA: G1.8.1
TOP: 11-3 Problem 1 Finding the Surface Area of a Pyramid
KEY: surface area of a pyramid | surface area | surface area formulas | pyramid

21. ANS: A PTS: 1 DIF: L2
REF: 11-3 Surface Areas of Pyramids and Cones
OBJ: 11-3.1 To find the surface area of a pyramid and a cone
NAT: CC G.MG.1| N.3.c| N.3.f| N.5.e| M.1.h| A.4.f STA: G1.8.1
TOP: 11-3 Problem 2 Finding the Lateral Area of a Pyramid
KEY: pyramid | slant height of a pyramid | Pythagorean Theorem

22. ANS: D PTS: 1 DIF: L3
REF: 11-3 Surface Areas of Pyramids and Cones
OBJ: 11-3.1 To find the surface area of a pyramid and a cone
NAT: CC G.MG.1| N.3.c| N.3.f| N.5.e| M.1.h| A.4.f STA: G1.8.1
TOP: 11-3 Problem 3 Finding the Surface Area of a Cone
KEY: surface area of a cone | surface area formulas | surface area | cone

23. ANS: A PTS: 1 DIF: L3
REF: 11-4 Volumes of Prisms and Cylinders
OBJ: 11-4.1 To find the volume of a prism and the volume of a cylinder
NAT: CC G.GMD.1| CC G.GMD.2| CC G.GMD.3| CC G.MG.1| N.3.c| N.3.f| N.5.e| M.1.h| A.4.f
STA: G1.8.1| G2.1.3 TOP: 11-4 Problem 2 Finding the Volume of a Triangular Prism
KEY: volume of a triangular prism | volume formulas | volume | prism

24. ANS: A PTS: 1 DIF: L3
REF: 11-4 Volumes of Prisms and Cylinders
OBJ: 11-4.1 To find the volume of a prism and the volume of a cylinder
NAT: CC G.GMD.1| CC G.GMD.2| CC G.GMD.3| CC G.MG.1| N.3.c| N.3.f| N.5.e| M.1.h| A.4.f
STA: G1.8.1| G2.1.3 TOP: 11-4 Problem 3 Finding the Volume of a Cylinder
KEY: volume of a cylinder | cylinder | volume formulas | volume

25. ANS: C PTS: 1 DIF: L4
REF: 11-4 Volumes of Prisms and Cylinders
OBJ: 11-4.1 To find the volume of a prism and the volume of a cylinder
NAT: CC G.GMD.1| CC G.GMD.2| CC G.GMD.3| CC G.MG.1| N.3.c| N.3.f| N.5.e| M.1.h| A.4.f
STA: G1.8.1| G2.1.3 TOP: 11-4 Problem 4 Finding Volume of a Composite Figure
KEY: volume of a composite figure | cylinder | volume of a cylinder | composite space figure | volume of a rectangular prism | volume formulas | volume | prism

26. ANS: B PTS: 1 DIF: L2
REF: 11-5 Volumes of Pyramids and Cones
OBJ: 11-5.1 To find the volume of a pyramid and of a cone
NAT: CC G.GMD.3| CC G.MG.1| N.3.c| N.3.f| N.5.e| M.1.h| A.4.f
STA: G1.8.1| G2.1.3 TOP: 11-5 Problem 1 Finding Volume of a Pyramid
KEY: volume of a pyramid | pyramid | volume formulas | volume

27. ANS: B PTS: 1 DIF: L3
REF: 11-5 Volumes of Pyramids and Cones
OBJ: 11-5.1 To find the volume of a pyramid and of a cone
NAT: CC G.GMD.3| CC G.MG.1| N.3.c| N.3.f| N.5.e| M.1.h| A.4.f
STA: G1.8.1| G2.1.3 TOP: 11-5 Problem 3 Finding the Volume of a Cone
KEY: volume of a cone | volume formulas | volume | cone

28. ANS: B PTS: 1 DIF: L2
REF: 11-6 Surface Areas and Volumes of Spheres
OBJ: 11-6.1 To find the surface area and volume of a sphere
NAT: CC G.GMD.3| CC G.MG.1| N.3.c| N.3.f| N.5.e| M.1.h| A.4.f
STA: G1.8.1 TOP: 11-6 Problem 1 Finding the Surface Area of a Sphere
KEY: surface area of a sphere | surface area formulas | surface area | sphere

29. ANS: C PTS: 1 DIF: L2
REF: 11-6 Surface Areas and Volumes of Spheres
OBJ: 11-6.1 To find the surface area and volume of a sphere
NAT: CC G.GMD.3| CC G.MG.1| N.3.c| N.3.f| N.5.e| M.1.h| A.4.f
STA: G1.8.1 TOP: 11-6 Problem 3 Finding the Volume of a Sphere
KEY: volume of a sphere | sphere | volume formulas | volume

30. ANS: A PTS: 1 DIF: L3
REF: 11-7 Areas and Volumes of Similar Solids
OBJ: 11-7.1 To compare and find the areas and volumes of similar solids
NAT: CC G.MG.1| CC G.MG.2| G.1.f| N.3.f| N.5.e| M.1.b| M.1.h
STA: G1.8.1 TOP: 11-7 Problem 1 Identifying Similar Solids
KEY: similar solids | similarity ratio | rectangular prism

31. ANS: A PTS: 1 DIF: L3
REF: 11-7 Areas and Volumes of Similar Solids
OBJ: 11-7.1 To compare and find the areas and volumes of similar solids
NAT: CC G.MG.1| CC G.MG.2| G.1.f| N.3.f| N.5.e| M.1.b| M.1.h
STA: G1.8.1 TOP: 11-7 Problem 2 Finding the Scale Factor
KEY: similarity ratio | surface areas of similar solids | prism

32. ANS: D PTS: 1 DIF: L2
REF: 11-7 Areas and Volumes of Similar Solids
OBJ: 11-7.1 To compare and find the areas and volumes of similar solids
NAT: CC G.MG.1| CC G.MG.2| G.1.f| N.3.f| N.5.e| M.1.b| M.1.h
STA: G1.8.1 TOP: 11-7 Problem 2 Finding the Scale Factor
KEY: similarity ratio | volumes of similar solids

33. ANS: B PTS: 1 DIF: L3
REF: 11-7 Areas and Volumes of Similar Solids
OBJ: 11-7.1 To compare and find the areas and volumes of similar solids
NAT: CC G.MG.1| CC G.MG.2| G.1.f| N.3.f| N.5.e| M.1.b| M.1.h
STA: G1.8.1 TOP: 11-7 Problem 3 Using a Scale Factor
KEY: similarity ratio | ratio of surface areas of similar solids | ratio of volumes of similar solids

34. ANS: A PTS: 1 DIF: L2 REF: 12-1 Tangent Lines
OBJ: 12-1.1 To use properties of a tangent to a circle NAT: CC G.C.2| G.3.h
STA: G1.6.2 TOP: 12-1 Problem 2 Finding Distance
KEY: tangent to a circle | point of tangency | properties of tangents | Pythagorean Theorem

35. ANS: C PTS: 1 DIF: L2 REF: 12-2 Chords and Arcs
OBJ: 12-2.1 To use congruent chords, arcs, and central angles NAT: CC G.C.2| G.3.h
STA: G1.6.2 TOP: 12-2 Problem 4 Finding Measures in a Circle
KEY: arc | central angle | congruent arcs | arc measure | arc addition | diameter

36. ANS: C PTS: 1 DIF: L2 REF: 12-2 Chords and Arcs
OBJ: 12-2.1 To use congruent chords, arcs, and central angles NAT: CC G.C.2| G.3.h
STA: G1.6.2 TOP: 12-2 Problem 4 Finding Measures in a Circle
KEY: arc | central angle | congruent arcs | chord

37. ANS: A PTS: 1 DIF: L2 REF: 12-3 Inscribed Angles
OBJ: 12-3.1 To find the measure of an inscribed angle
NAT: CC G.C.2| CC G.C.3| CC G.C.4| G.3.h STA: G1.6.3
TOP: 12-3 Problem 1 Using the Inscribed Angle Theorem
KEY: circle | inscribed angle | intercepted arc | inscribed angle-arc relationship

38. ANS: C PTS: 1 DIF: L3
REF: 12-4 Angle Measures and Segment Lengths
OBJ: 12-4.1 To find measures of angles formed by chords, secants, and tangents
NAT: CC G.C.2| G.3.h TOP: 12-4 Problem 1 Finding Angle Measures
KEY: circle | secant | angle measure | arc measure | intersection outside the circle

39. ANS: A PTS: 1 DIF: L3
REF: 12-4 Angle Measures and Segment Lengths
OBJ: 12-4.1 To find measures of angles formed by chords, secants, and tangents
NAT: CC G.C.2| G.3.h TOP: 12-4 Problem 1 Finding Angle Measures
KEY: circle | secant | angle measure | arc measure | intersection inside the circle

40. ANS: A PTS: 1 DIF: L3 REF: 12-1 Tangent Lines
OBJ: 12-1.1 To use properties of a tangent to a circle NAT: CC G.C.2| G.3.h
STA: G1.6.2 TOP: 12-1 Problem 5 Circles Inscribed in Polygons
KEY: properties of tangents | tangent to a circle | triangle