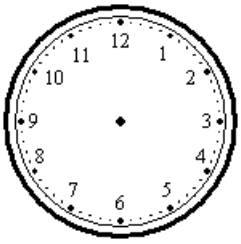
Geometry 2018 MIDTERM STUDY GUIDE

Multiple Choice
Identify the choice that best completes the statement or answers the question.

____ 1. The point *A*(–7, 3) is translated onto A' by the vector $\vec{u} = \langle 5, -4 \rangle$. The coordinates of A' are _____.
a. (–2, –1) b. (–12, 7) c. (2, –7) d. (5, –4)

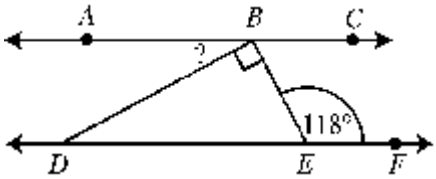
____ 2. Which best describes the relationship between *Line 1* and *Line 2*?
Line 1 passes through $(-3, 6)$ and $(-7, 11)$
Line 2 passes through $(1, 8)$ and $(-4, 4)$
a. perpendicular
b. They are the same line.
c. parallel
d. neither perpendicular nor parallel

____ 3. How many degrees does a minute hand move in 55 minutes?



a. 275° c. 220°
b. 330° d. 165°

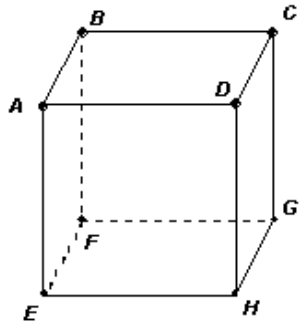
____ 4. If $\overline{AC}$ is parallel to $\overline{DF}$, what is the measure, in degrees, of $\angle ABD$?



a. 28° c. 62°
b. 72° d. 38°

____ 5. *R*, *S*, and *T* are collinear. *S* is between *R* and *T*. *RS* = 2*w* + 1, *ST* = *w* – 1, and *RT* = 18. Use the Segment Addition Postulate to solve for *w*. Then determine the length of $\overline{RS}$.
a. 16 b. 5 c. 13 d. 6

Use the figure below.



____ 6. For the cube shown, $\overleftrightarrow{AD}$ and $\overleftrightarrow{HG}$ are _____.

a. parallel lines
b. oblique lines
c. skew lines
d. perpendicular lines

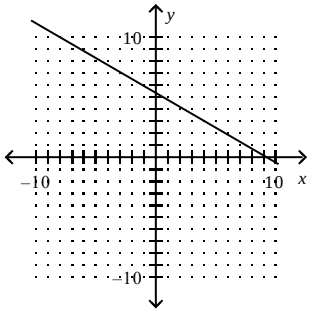
____ 7. Write an equation that is perpendicular to $y = -4x + 2$.

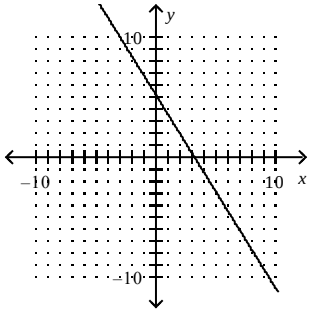
a. $y = 4x + 2$
b. $y = -4x - 2$
c. $y = \frac{1}{4}x + 1$
d. $y = -\frac{1}{4}x + 1$

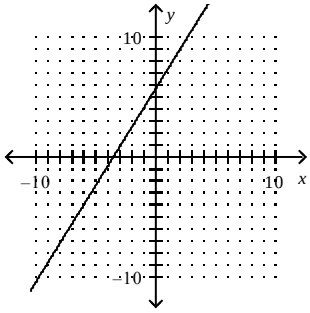
____ 8. If an obtuse angle is bisected, the resulting angles are _____.

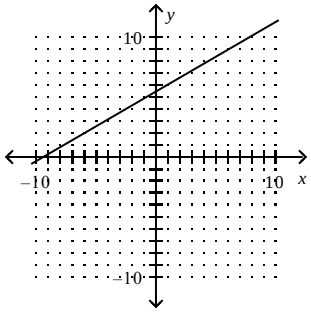
a. always acute
b. right angles
c. never congruent
d. always obtuse

____ 9. Which graph shows the line that passes through $(-2, 2)$ and is parallel to a line with a slope of $\frac{5}{3}$?

a.


c.


b.


d.


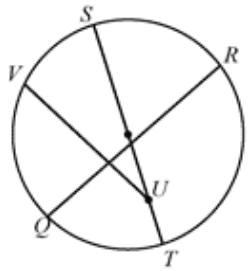
____ 10. If $PQ = 3$ and $PQ + RS = 5$, then $3 + RS = 5$ is an example of the _____.

a. Substitution Property of Equality
b. Multiplication Property of Equality
c. Transitive Property of Equality
d. Reflexive Property of Equality

____ 11. The notation for the length of the segment between *P* and *Q* is _____.

a. $\overleftrightarrow{PQ}$ b. $\overline{PQ}$ c. $\overrightarrow{QP}$ d. PQ

____ 12. Identify two chords.



a. $\overline{QR}$ and $\overline{ST}$
b. $\overline{ST}$ and $\overline{UV}$
c. $\overline{QS}$ and $\overline{RT}$
d. $\overline{QR}$ and $\overline{UV}$

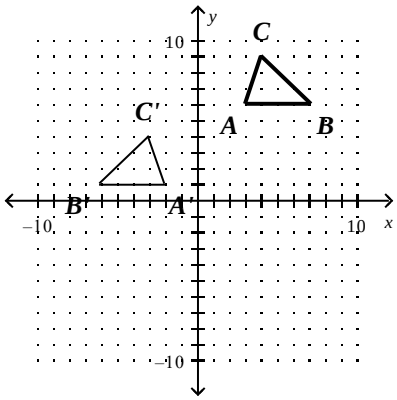
____ 13. Give the reason for the last statement in the proof.

Statement	Reason
$\angle 1$ and $\angle 2$ are a linear pair.	Given
$m\angle 1 + m\angle 2 = 180°$	?

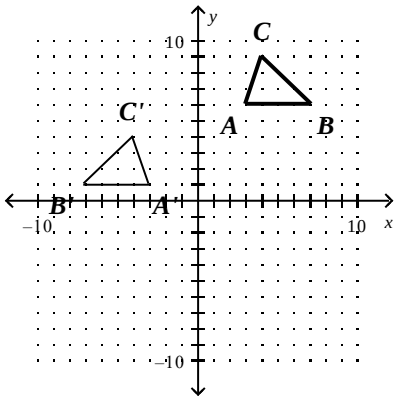
a. Linear Pair Postulate
b. Congruent Complements Theorem
c. Vertical Angles Congruence Theorem
d. Congruent Supplements Theorem

____ 14. Which of the following shows the image of ΔABC after the glide reflection described?
Translation: $(x, y) \rightarrow (x,\ y-4)$;
Reflection: in $x = 0$

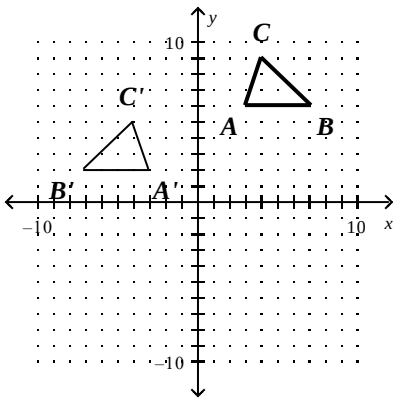
a.



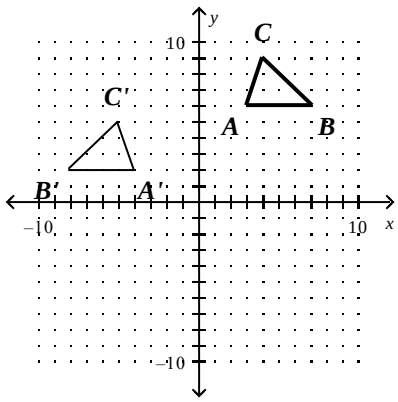
c.



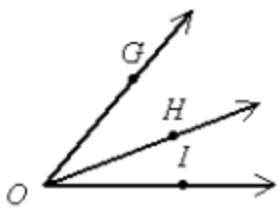
b.



d.



____ 15. If $m\angle HOI = 21°$ and $m\angle GOI = 50°$, then what is the measure of $\angle GOH$?



a. 34° b. 26° c. 31° d. 29°

____ 16. Write an equation that is parallel to $y = \frac{2}{3}x - 7$.

a. $y = -\frac{3}{2}x + 7$

b. $y = \frac{2}{3}x + 1$

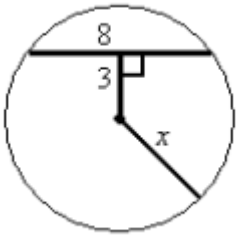
c. $y = \frac{3}{2}x + 2$

d. $y = -\frac{2}{3}x - 7$

____ 17. If *AB* = 11 and *AC* = 26, find the length of $\overline{BC}$.

a. 15 b. 5 c. 37 d. 11

____ 18. Find the value of *x*.

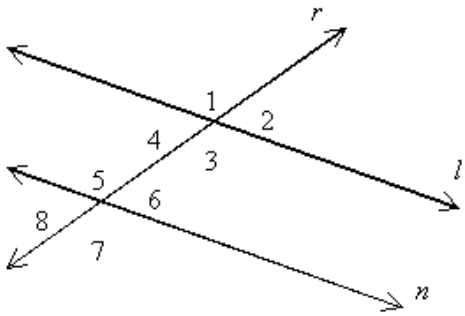


a. 8.5
b. 7.4
c. 5.0
d. 6.3

____ 19. Find the slope-intercept form of the line passing through the point $(-6, 9)$ and parallel to the line $y = -9x - 3$.

a. $y = -9x - 45$
b. $y = \frac{1}{9}x + \frac{29}{3}$
c. $y = -9x + 75$
d. $y = 9x - 45$

____ 20. In the figure, $l \parallel n$ and r is a transversal. Which of the following is not necessarily true?



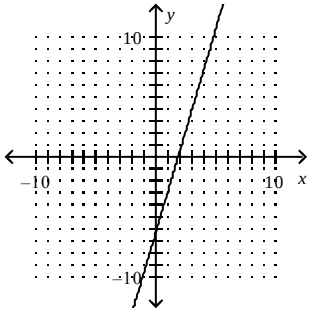
a. $\angle 8 \cong \angle 2$
b. $\angle 2 \cong \angle 6$
c. $\angle 5 \cong \angle 3$
d. $\angle 7 \cong \angle 4$

____ 21. The nonshared sides of two adjacent angles form a pair of opposite rays. The angles are _____.

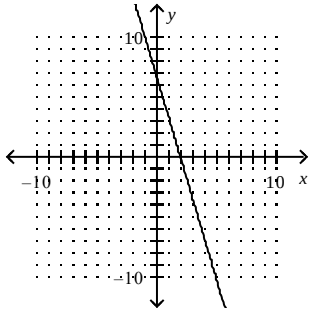
a. acute
b. complementary
c. a linear pair
d. vertical angles

____ 22. Graph the linear equation $7x - 2y = -14$ by finding *x*- and *y*-intercepts.

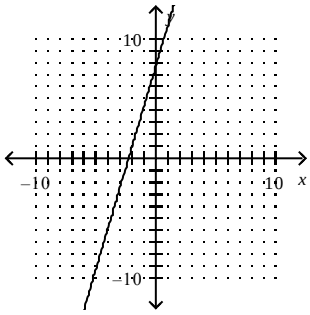
a.



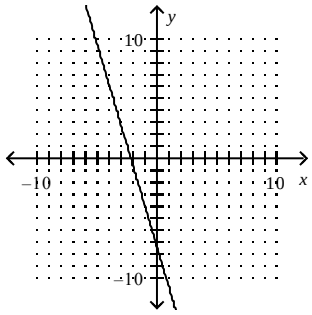
c.



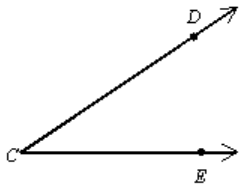
b.



d.

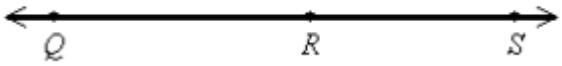


____ 23. Which does *not* name the angle below?



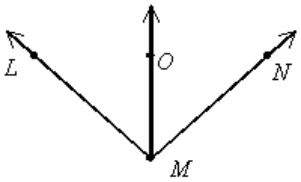
a. $\angle DCE$ b. $\angle CDE$ c. $\angle ECD$ d. $\angle C$

____ 24. If $RS = 40.9$ and $QS = 91.7$, find QR.



a. 40.8 b. 40.9 c. 50.8 d. 132.6

____ 25. In the figure (not drawn to scale), $\overrightarrow{MO}$ bisects $\angle LMN$, $m\angle LMO = (15x - 21)°$, and $m\angle NMO = (x + 63)°$. Solve for x and find $m\angle LMN$.

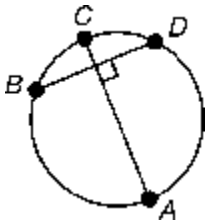


a. 3, 24° b. 6, 138° c. 6, 111° d. 3, 27°

____ 26. Identify the property of congruence.
If $\angle B \cong \angle C$, then $\angle C \cong \angle B$.

a. Transitive Property of Congruence
b. Reflexive Property of Congruence
c. Substitution Property
d. Symmetric Property of Congruence

____ 27. Given $\overline{AC}$ bisects $\overline{BD}$, choose the true statement that refers to the figure.



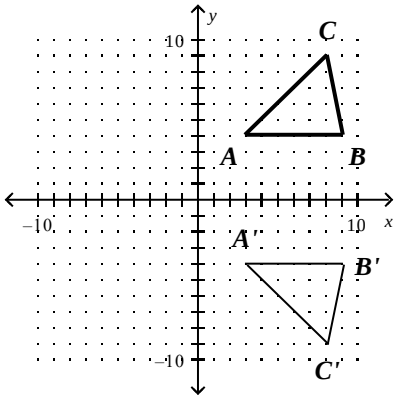
a. $\widehat{CD} = \widehat{BA}$
b. $\widehat{BCD}$ is a major arc.
c. $\overline{AC}$ is a diameter.
d. $\widehat{BAD}$ is a minor arc.

____ 28. Write an equation that is parallel to $y = \frac{1}{2}x + 3$ and passes through (0, 0).

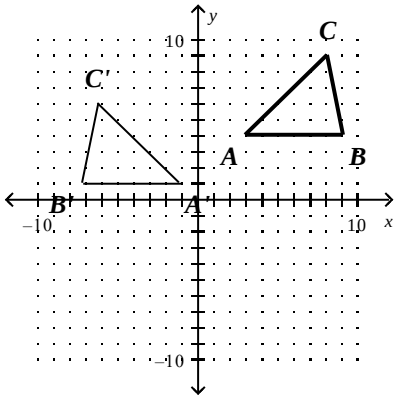
a. $y = \frac{1}{2}x + 6$
b. $y = \frac{1}{2}x - 3$
c. $y = \frac{1}{2}x$
d. $y = 2x$

____ 29. Which of the following shows the image of $\triangle ABC$ after the glide reflection described?
Translation: $(x, y) \rightarrow (x,\ y - 3)$; Reflection: in $x = 1$

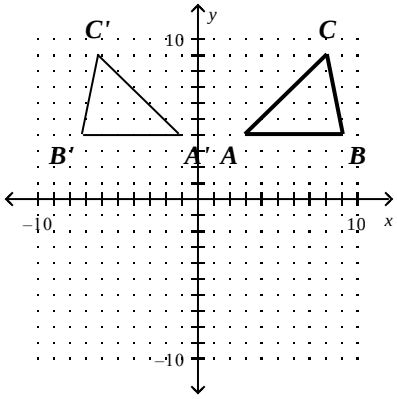
a.



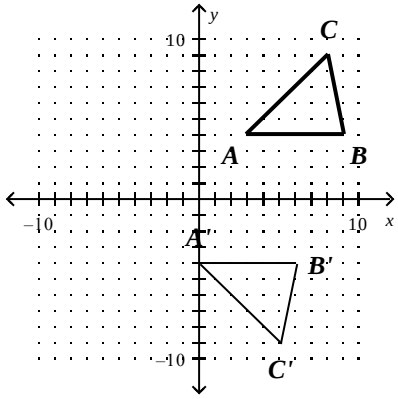
c.



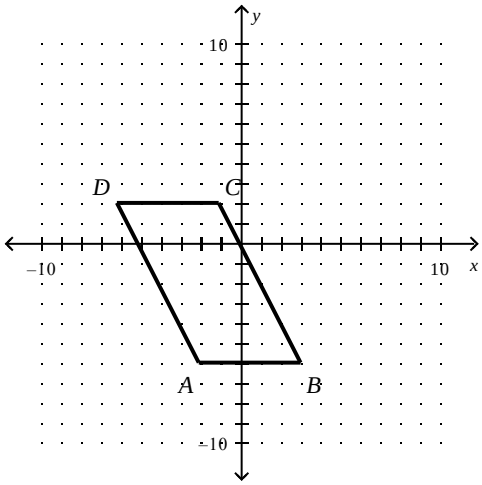
b.



d.



____ 30. The diagonals of parallelogram *ABCD* have a common midpoint.



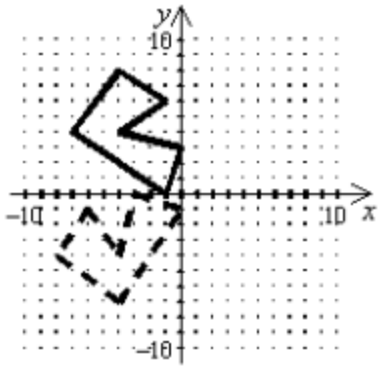
Which of the following is the midpoint of the diagonals of *ABCD*?

a. $(-1.5, -2)$
b. $(-1.5, 4)$
c. $(0.5, -2)$
d. $(0.5, 4)$

____ 31. A reflection is always _____.

a. a rotation
b. a translation
c. an isometry
d. reflexive

____ 32. The change in position from the solid figure to the dotted figure is best described as a _____.



a. reflection
b. translation
c. rotation
d. transmission

____ 33. If a circle has a diameter of 12, then it has _____.
a. a radius of 4
b. a radius of 24
c. a radius of 6
d. a diameter of 6

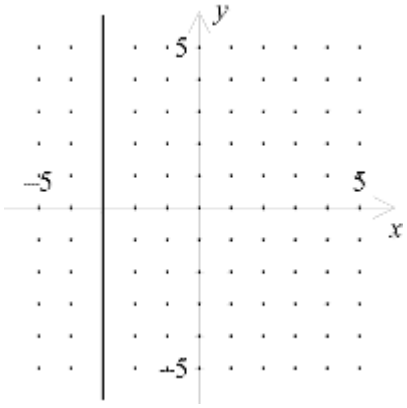
____ 34. $\angle 1$ and $\angle 2$ are supplementary angles. $\angle 1$ and $\angle 3$ are vertical angles. If $m\angle 2 = 72°$, what is $m\angle 3$?
a. $18°$
b. $72°$
c. $108°$
d. $28°$

____ 35. Give the reason for the last statement in the proof.

Statement	Reason
$\angle 1$ and $\angle 2$ are vertical angles.	Given
$\angle 1 \cong \angle 2$	?

a. Vertical Angles Congruence Theorem
b. Congruent Complements Theorem
c. Congruent Supplements Theorem
d. Linear Pair Postulate

____ 36. Determine the slope of the line graphed below.

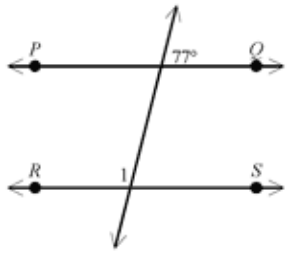


a. 0
c. undefined

b. $-\frac{1}{3}$

d. -3

____ 37. Find $m\angle 1$ in the figure below. $\overleftrightarrow{PQ}$ and $\overleftrightarrow{RS}$ are parallel.



a. 13°

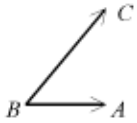
b. 113°

c. 77°

d. 103°

____ 38. Draw a labeled diagram for a line segment.

a.



b.

c.

d.

____ 39. Find the slope of the line passing through the points $A(-8, -6)$ and $B(4, 5)$.

a. $\frac{1}{4}$

b. $\frac{11}{12}$

c. $\frac{12}{11}$

d. 4

____ 40. Let A be between B and C. Use the Segment Addition Postulate to solve for t.

$BA = 5t + 21$
$AC = 7t + 15$
$BC = 24$

a. $t = 1$

b. $t = 2$

c. $t = 3$

d. $t = -1$

____ 41. A circle is the set of all points in a plane that _____.

a. have a center

b. are equidistant from a given point

c. have a diameter

d. lie within a given radius

____ 42. What is the slope of the line that passes through points A (-2,-3) and B (5,3)?

a. $\frac{6}{7}$

b. $\frac{7}{6}$

c. $-\frac{6}{7}$

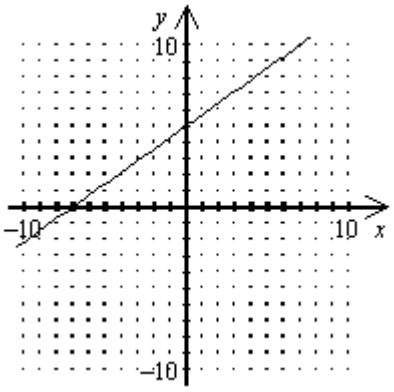
d. 0

____ 43. A line which intersects a circle at exactly one point is called_____.

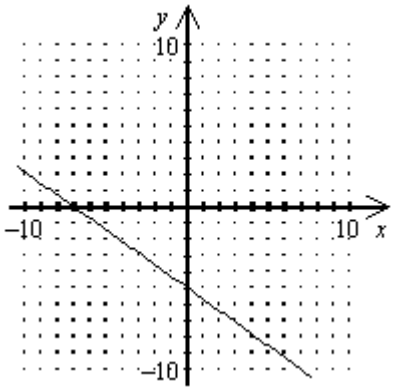
a. a point of tangency
b. a tangent line
c. a chord
d. a secant

____ 44. Graph the equation $5x - 7y = -35$.

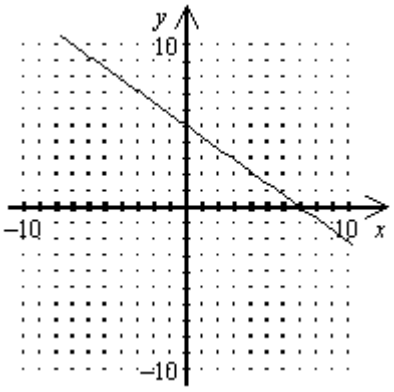
a.



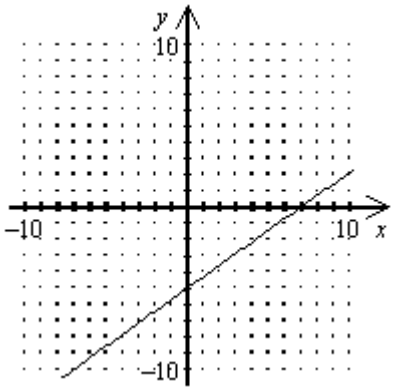
c.



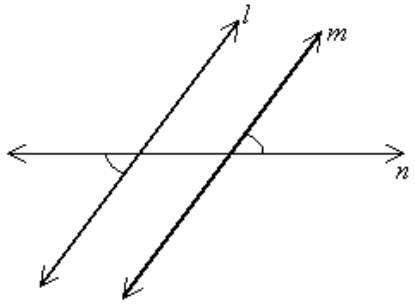
b.



d.



____ 45. Refer to the figure. Which theorem guarantees *l* and *m* are parallel?



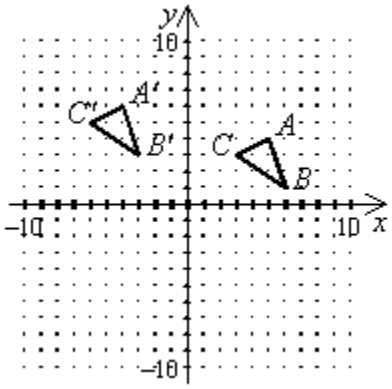
a. Alternate Interior Angles Converse
b. Consecutive Interior Angles Converse
c. Corresponding Angles Converse
d. Alternate Exterior Angles Converse

____ 46. Find the midpoint of the segment with endpoints (9, 3) and (–7, 2).

a. (2, 5)
b. $(8, \frac{1}{2})$
c. (6, –9)
d. $(1, \frac{5}{2})$

____ 47. The center of a circle lies on _____.
a. every diameter
b. the circle
c. a tangent line
d. every chord

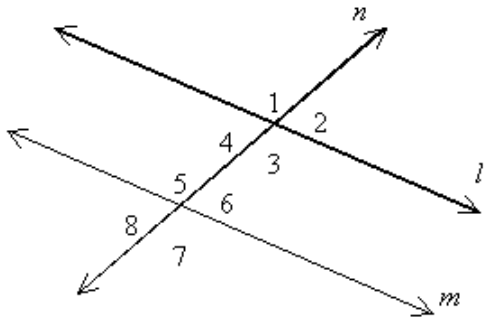
____ 48. The rule for this transformation of $\triangle ABC$ onto $\triangle A'B'C'$ is _____ .



a. $(x, y) \rightarrow (x - 9, y - 2)$
b. $(x, y) \rightarrow (x + 9, y + 2)$
c. $(x, y) \rightarrow (x - 9, y + 2)$
d. $(x, y) \rightarrow (x + 9, y - 2)$

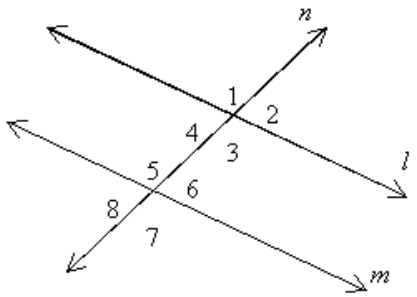
____ 49. Find the distance between the points (–5, –6) and (5, 1).
a. $\sqrt{149}$
b. 5
c. 149
d. 25

____ 50. In the figure, $\angle 6$ and $\angle 3$ are _____.



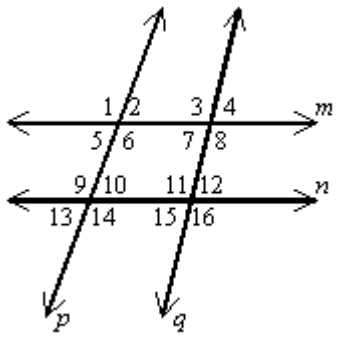
a. alternate exterior angles
b. consecutive interior angles
c. corresponding angles
d. alternate interior angles

____ 51. In the figure, $\angle 6$ and $\angle 2$ are _____.



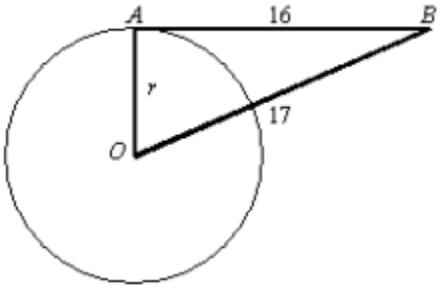
a. alternate interior angles
b. consecutive interior angles
c. alternate exterior angles
d. corresponding angles

____ 52. Line *m* is parallel to line *n* and they are each intersected by the same two transversals. Which angle is NOT necessarily congruent to $\angle 4$?



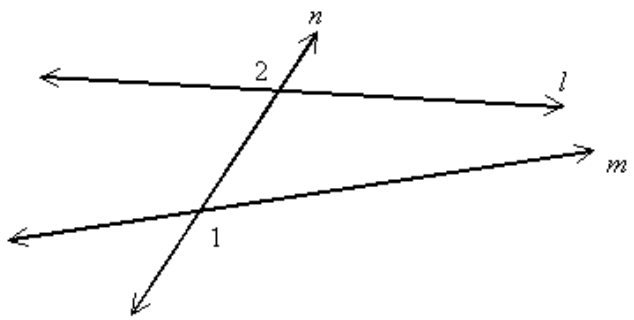
a. $\angle 12$
b. $\angle 16$
c. $\angle 7$
d. $\angle 15$

____ 53. You are standing at point *B*. Point *B* is 17 feet from the center of the circular water storage tank and 16 feet from point *A*. $\overline{AB}$ is tangent to $\odot O$ at *A*. Find the radius of the tank.



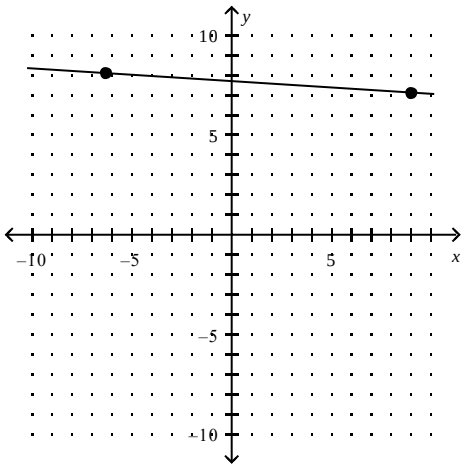
a. 11.5 ft.
b. 23.3 ft.
c. 5.7 ft.
d. 12.2 ft.

____ 54. In the figure, $\angle 1$ and $\angle 2$ are _____.



a. alternate exterior angles
b. alternate interior angles
c. consecutive interior angles
d. corresponding angles

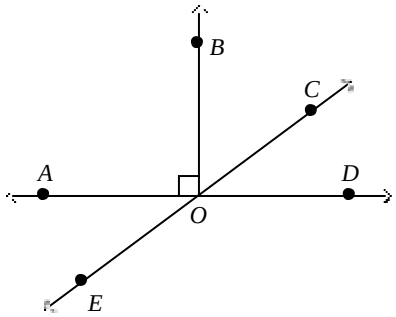
____ 55. Find the slope of the line.



a. -15
b. $\frac{1}{5}$
c. 5
d. $-\frac{1}{15}$

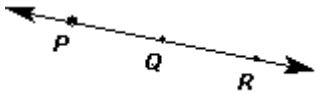
____ 56. $\angle 1$ and $\angle 2$ form a linear pair. If $m\angle 2 = 67°$, what is $m\angle 1$?
a. $23°$
b. $33°$
c. $113°$
d. $67°$

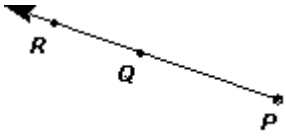
____ 57. Name an angle supplementary to $\angle COD$.

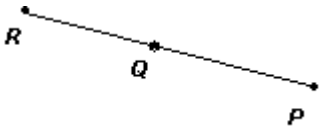


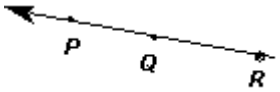
a. $\angle DOE$
b. $\angle BOC$
c. $\angle AOE$
d. $\angle BOD$

____ 58. $\overrightarrow{PR}$ is represented by which sketch?

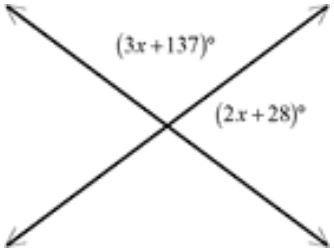
a. 

c. 

b. 

d. 

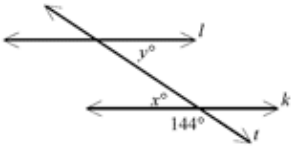
____ 59. Solve for *x*.



a. 3
b. 6
c. 1
d. 2

College Entrance Exam:

____ 60. In the figure below, if *l* and *k* are parallel lines, what is the value of *x* + *y*?



a. 180°
c. 72°

b. $36°$ d. $144°$

____ 61. Find the slope of the line that contains (2, 4) and $(4, 4)$.

a. $\frac{1}{3}$ c. 0

b. undefined d. 4

____ 62. A segment with endpoints on a circle is a _____.

a. secant c. tangent

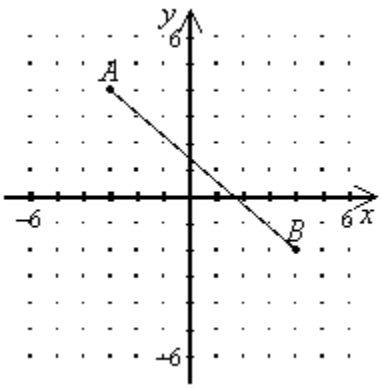
b. radius d. chord

____ 63. What is the slope of a line perpendicular to the line $-5x - 7y = -6$?

a. $\frac{7}{5}$ c. $-\frac{5}{7}$

b. $-\frac{7}{5}$ d. $\frac{5}{7}$

____ 64. The distance between points *A* and *B* is _____.



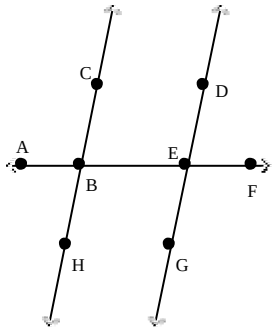
a. $\sqrt{13}$ b. $\sqrt{11}$ c. $\sqrt{85}$ d. 85

Complete the conditional statement to make a true statement.

____ 65. If $\angle R$ and $\angle S$ are complementary and $m\angle R = 24°$, then

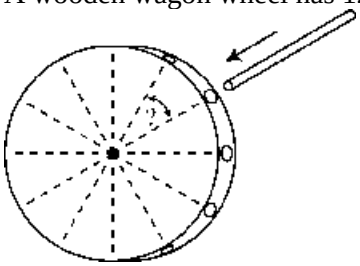
a. $m\angle S = 204°$ b. $m\angle S = 114°$ c. $m\angle S = 66°$ d. $m\angle S = 156°$

____ 66. In the figure shown, $\overleftrightarrow{HC} \parallel \overleftrightarrow{GD}$ and $m\angle ABC = 106°$. Which of the following statements is false?



a. $m\angle GEF = 106°$
b. $\angle EBH$ and $\angle FEG$ are corresponding angles.
c. $m\angle CBE = 106°$
d. $\angle EBH$ and $\angle DEB$ are alternate interior angles.

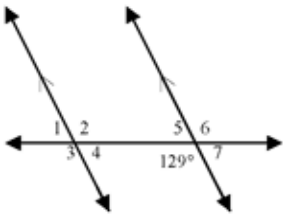
____ 67. A wooden wagon wheel has 12 equally spaced spokes radiating from the central hub.



What is the measure of the angle that determines the separation between two adjacent spoke holes?

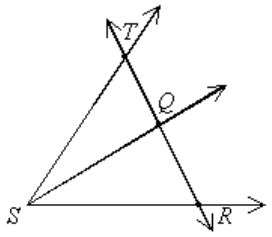
a. 22.5°
b. 30°
c. 12°
d. 45°

____ 68. Use the figure to find the measure of $\angle 7$.



a. 141°
b. 129°
c. 84°
d. 51°

____ 69. Name three points that are collinear.



a. points *T*, *Q*, and *R*
b. points *T*, *Q*, and *S*
c. points *S*, *Q*, and *R*
d. points *T*, *S*, and *R*

____ 70. Which of the following is an example of the Transitive Property?
a. $x - 5 = x - 5$
b. If $y = x + 4$, then $x + 4 = y$.
c. If $x - 5 = y$ and $y = 4$, then $x - 5 = 4$.
d. If $x = -5$, then $x + 4 = -5 + 4$.

Geometry 2018 MIDTERM STUDY GUIDE
Answer Section

MULTIPLE CHOICE

1. ANS: A PTS: 1 DIF: Level B REF: MLGE0408
LOC: NCTM.PSSM.00.MTH.9-12.GEO.2.a
TOP: Lesson 9.1 Translate Figures and Use Vectors KEY: translate | vector | coordinate
MSC: DOK 2 NOT: 978-0-547-31534-8
2. ANS: A PTS: 1 DIF: Level B REF: MHGM0007
NAT: NT.CCSS.MTH.10.9-12.G.GPE.5 TOP: Lesson 3.4 Find and Use Slopes of Lines
KEY: line | slope | parallel | perpendicular MSC: DOK 2
NOT: 978-0-547-31534-8
3. ANS: B PTS: 1 DIF: Level B REF: MHGM0068
TOP: Lesson 10.2 Find Arc Measures KEY: degree | measure | clock
MSC: DOK 1 NOT: 978-0-547-31534-8
4. ANS: A PTS: 1 DIF: Level C REF: MC100129
LOC: NCTM.PSSM.00.MTH.9-12.GEO.1.a
TOP: Lesson 3.2 Use Parallel Lines and Transversals
KEY: angle | triangle | sum | parallel | perpendicular MSC: DOK 2
NOT: 978-0-547-31534-8
5. ANS: C PTS: 1 DIF: Level B REF: MGEH0002
TOP: Lesson 1.2 Use Segments and Congruence
KEY: segment length | segment addition postulate MSC: DOK 2
NOT: 978-0-547-31534-8
6. ANS: C PTS: 1 DIF: Level B REF: MHGT0135
NAT: NT.CCSS.MTH.10.9-12.G.CO.1 TOP: Lesson 3.1 Identify Pairs of Lines and Angles
KEY: cube | skew MSC: DOK 1 NOT: 978-0-547-31534-8
7. ANS: C PTS: 1 DIF: Level B REF: MGEH0035
NAT: NT.CCSS.MTH.10.9-12.G.GPE.5 | NT.CCSS.MTH.10.9-12.A.CED.2
TOP: Lesson 3.5 Write and Graph Equations of Lines KEY: line | equation | perpendicular
MSC: DOK 2 NOT: 978-0-547-31534-8
8. ANS: A PTS: 1 DIF: Level B REF: MGEH0007
TOP: Lesson 1.4 Measure and Classify Angles KEY: angle bisector | obtuse angle
MSC: DOK 2 NOT: 978-0-547-31534-8
9. ANS: B PTS: 1 DIF: Level C REF: MC100249
NAT: NT.CCSS.MTH.10.9-12.G.GPE.5 TOP: Lesson 3.4 Find and Use Slopes of Lines
KEY: line | graph | parallel MSC: DOK 3 NOT: 978-0-547-31534-8
10. ANS: A PTS: 1 DIF: Level A REF: MHGT0089
LOC: NCTM.PSSM.00.MTH.9-12.ALG.2.b
TOP: Lesson 2.5 Reason Using Properties from Algebra
KEY: property | substitution | multiplication | transitive | reflexive
MSC: DOK 1 NOT: 978-0-547-31534-8
11. ANS: D PTS: 1 DIF: Level A REF: MHGT0075
NAT: NT.CCSS.MTH.10.9-12.G.CO.1 TOP: Lesson 1.2 Use Segments and Congruence
KEY: notation | segment length MSC: DOK 1 NOT: 978-0-547-31534-8
12. ANS: A PTS: 1 DIF: Level A REF: POW70028
TOP: Lesson 10.1 Use Properties of Tangents KEY: circle | chord
MSC: DOK 1 NOT: 978-0-547-31534-8

13. ANS: A PTS: 1 DIF: Level A REF: MHGM0029E
NAT: NT.CCSS.MTH.10.9-12.G.CO.9 TOP: Lesson 2.7 Prove Angle Pair Relationships
KEY: proof | deductive | postulate MSC: DOK 1 NOT: 978-0-547-31534-8
14. ANS: C PTS: 1 DIF: Level B REF: MLGE0362
TOP: Lesson 9.5 Apply Compositions of Transformations KEY: glide reflection
MSC: DOK 2 NOT: 978-0-547-31534-8
15. ANS: D PTS: 1 DIF: Level B REF: MHGM0014
NAT: NT.CCSS.MTH.10.9-12.G.CO.1 TOP: Lesson 1.4 Measure and Classify Angles
KEY: angle measure | angle addition postulate MSC: DOK 2
NOT: 978-0-547-31534-8
16. ANS: B PTS: 1 DIF: Level B REF: MGEH0032
NAT: NT.CCSS.MTH.10.9-12.G.GPE.5 | NT.CCSS.MTH.10.9-12.A.CED.2
TOP: Lesson 3.5 Write and Graph Equations of Lines KEY: line | equation | parallel
MSC: DOK 2 NOT: 978-0-547-31534-8
17. ANS: A PTS: 1 DIF: Level A REF: DBXM1001
TOP: Lesson 1.2 Use Segments and Congruence
KEY: segment length | segment addition postulate MSC: DOK 2
NOT: 978-0-547-31534-8
18. ANS: C PTS: 1 DIF: Level B REF: PHGM1209
TOP: Lesson 10.3 Apply Properties of Chords KEY: circle | radius | chord
MSC: DOK 2 NOT: 978-0-547-31534-8
19. ANS: A PTS: 1 DIF: Level B REF: DBIM0711
NAT: NT.CCSS.MTH.10.9-12.G.GPE.5 | NT.CCSS.MTH.10.9-12.A.CED.2
TOP: Lesson 3.5 Write and Graph Equations of Lines
KEY: line | equation | point | parallel | slope-intercept form MSC: DOK 2
NOT: 978-0-547-31534-8
20. ANS: D PTS: 1 DIF: Level B REF: MGEH0026
LOC: NCTM.PSSM.00.MTH.9-12.GEO.1.a
TOP: Lesson 3.2 Use Parallel Lines and Transversals KEY: parallel | transversal
MSC: DOK 3 NOT: 978-0-547-31534-8
21. ANS: C PTS: 1 DIF: Level B REF: MGEH0009
NAT: NT.CCSS.MTH.10.9-12.G.CO.1 TOP: Lesson 1.5 Describe Angle Pair Relationships
KEY: adjacent angles MSC: DOK 1 NOT: 978-0-547-31534-8
22. ANS: B PTS: 1 DIF: Level B REF: ML2A0266
NAT: NT.CCSS.MTH.10.9-12.A.CED.2 | NT.CCSS.MTH.10.9-12.F.IF.4
TOP: Lesson 3.5 Write and Graph Equations of Lines KEY: linear | graph | intercept
MSC: DOK 2 NOT: 978-0-547-31534-8
23. ANS: B PTS: 1 DIF: Level A REF: XMOD0506
NAT: NT.CCSS.MTH.10.9-12.G.CO.1 TOP: Lesson 1.4 Measure and Classify Angles
KEY: angle | name MSC: DOK 1 NOT: 978-0-547-31534-8
24. ANS: C PTS: 1 DIF: Level B REF: PHGM0109
TOP: Lesson 1.2 Use Segments and Congruence
KEY: segment length | segment addition postulate MSC: DOK 2
NOT: 978-0-547-31534-8
25. ANS: B PTS: 1 DIF: Level B REF: MLGE0245
NAT: NT.CCSS.MTH.10.9-12.G.CO.1 TOP: Lesson 1.4 Measure and Classify Angles
KEY: solve | linear equation | angle bisector | angle measure MSC: DOK 2
NOT: 978-0-547-31534-8
26. ANS: D PTS: 1 DIF: Level A REF: MHGM0025
TOP: Lesson 2.6 Prove Statements about Segments and Angles

KEY: property | congruence | symmetric | transitive | reflexive MSC: DOK 1
NOT: 978-0-547-31534-8

27. ANS: C PTS: 1 DIF: Level A REF: HLGM0980
TOP: Lesson 10.3 Apply Properties of Chords KEY: diameter
MSC: DOK 1 NOT: 978-0-547-31534-8

28. ANS: C PTS: 1 DIF: Level B REF: MGEH0034
NAT: NT.CCSS.MTH.10.9-12.G.GPE.5 | NT.CCSS.MTH.10.9-12.A.CED.2
TOP: Lesson 3.5 Write and Graph Equations of Lines KEY: line | equation | parallel
MSC: DOK 2 NOT: 978-0-547-31534-8

29. ANS: C PTS: 1 DIF: Level B REF: MLGE0360
TOP: Lesson 9.5 Apply Compositions of Transformations KEY: glide reflection
MSC: DOK 2 NOT: 978-0-547-31534-8

30. ANS: A PTS: 1 DIF: Level B REF: MC100253
LOC: NCTM.PSSM.00.MTH.9-12.GEO.2.a
TOP: Lesson 1.3 Use Midpoint and Distance Formulas
KEY: midpoint | parallelogram | diagonals | coordinate geometry
MSC: DOK 2 NOT: 978-0-547-31534-8

31. ANS: C PTS: 1 DIF: Level A REF: HLGM0524
TOP: Lesson 9.3 Perform Reflections KEY: reflection | isometry
MSC: DOK 1 NOT: 978-0-547-31534-8

32. ANS: C PTS: 1 DIF: Level A REF: MLGE0331
TOP: Lesson 9.4 Perform Rotations KEY: reflection | rotation | translation | transformation
MSC: DOK 1 NOT: 978-0-547-31534-8

33. ANS: C PTS: 1 DIF: Level A REF: HLGM0829
TOP: Lesson 10.1 Use Properties of Tangents KEY: circle | diameter | radius
MSC: DOK 1 NOT: 978-0-547-31534-8

34. ANS: C PTS: 1 DIF: Level B REF: MLGE0445
LOC: NCTM.PSSM.00.MTH.9-12.GEO.1.a
TOP: Lesson 2.7 Prove Angle Pair Relationships KEY: vertical | angle | supplementary
MSC: DOK 1 NOT: 978-0-547-31534-8

35. ANS: A PTS: 1 DIF: Level A REF: MHGM0029C
NAT: NT.CCSS.MTH.10.9-12.G.CO.9 TOP: Lesson 2.7 Prove Angle Pair Relationships
KEY: proof | deductive | postulate MSC: DOK 1 NOT: 978-0-547-31534-8

36. ANS: C PTS: 1 DIF: Level B REF: MALG0655
TOP: Lesson 3.4 Find and Use Slopes of Lines KEY: slope
MSC: DOK 2 NOT: 978-0-547-31534-8

37. ANS: D PTS: 1 DIF: Level B REF: MLGE0205
TOP: Lesson 3.2 Use Parallel Lines and Transversals KEY: angles | parallel lines | transversal
MSC: DOK 2 NOT: 978-0-547-31534-8

38. ANS: D PTS: 1 DIF: Level A REF: MHGM0506
TOP: Lesson 1.1 Identify Points, Lines, and Planes KEY: line | angle | draw | segment | ray
MSC: DOK 1 NOT: 978-0-547-31534-8

39. ANS: B PTS: 1 DIF: Level A REF: DBIM0706
TOP: Lesson 3.4 Find and Use Slopes of Lines KEY: slope
MSC: DOK 2 NOT: 978-0-547-31534-8

40. ANS: D PTS: 1 DIF: Level B REF: MHGM0013
TOP: Lesson 1.2 Use Segments and Congruence
KEY: solve | variable | segment addition postulate MSC: DOK 2
NOT: 978-0-547-31534-8

41. ANS: B PTS: 1 DIF: Level A REF: HLGM0826
NAT: NT.CCSS.MTH.10.9-12.G.CO.1 LOC: NCTM.PSSM.00.MTH.9-12.GEO.1.a
TOP: Lesson 10.1 Use Properties of Tangents KEY: circle | point | plane
MSC: DOK 1 NOT: 978-0-547-31534-8

42. ANS: A PTS: 1 DIF: Level A REF: MGEO0006
TOP: Lesson 3.4 Find and Use Slopes of Lines KEY: line | slope | point
MSC: DOK 2 NOT: 978-0-547-31534-8

43. ANS: B PTS: 1 DIF: Level A REF: HLGM0950
TOP: Lesson 10.1 Use Properties of Tangents KEY: circle | tangent | intersect
MSC: DOK 1 NOT: 978-0-547-31534-8

44. ANS: A PTS: 1 DIF: Level B REF: MGEO0065
NAT: NT.CCSS.MTH.10.9-12.A.CED.2 TOP: Lesson 3.5 Write and Graph Equations of Lines
KEY: equation | graph MSC: DOK 2 NOT: 978-0-547-31534-8

45. ANS: D PTS: 1 DIF: Level A REF: MGEH0029
TOP: Lesson 3.3 Prove Lines are Parallel KEY: converse | alternate exterior angles
MSC: DOK 1 NOT: 978-0-547-31534-8

46. ANS: D PTS: 1 DIF: Level A REF: AKA20905
LOC: NCTM.PSSM.00.MTH.9-12.GEO.2.a
TOP: Lesson 1.3 Use Midpoint and Distance Formulas KEY: midpoint formula
MSC: DOK 2 NOT: 978-0-547-31534-8

47. ANS: A PTS: 1 DIF: Level A REF: HLGM0828
TOP: Lesson 10.1 Use Properties of Tangents KEY: circle | diameter | center
MSC: DOK 1 NOT: 978-0-547-31534-8

48. ANS: C PTS: 1 DIF: Level B REF: MGEO0015
NAT: NT.CCSS.MTH.10.9-12.G.CO.2 LOC: NCTM.PSSM.00.MTH.9-12.GEO.3.a
TOP: Lesson 9.1 Translate Figures and Use Vectors KEY: triangle | map | motion
MSC: DOK 2 NOT: 978-0-547-31534-8

49. ANS: A PTS: 1 DIF: Level A REF: DBTM0807
LOC: NCTM.PSSM.00.MTH.9-12.GEO.2.a
TOP: Lesson 1.3 Use Midpoint and Distance Formulas
KEY: distance formula | coordinate geometry MSC: DOK 2
NOT: 978-0-547-31534-8

50. ANS: B PTS: 1 DIF: Level B REF: MGEH0023
NAT: NT.CCSS.MTH.10.9-12.G.CO.1 TOP: Lesson 3.1 Identify Pairs of Lines and Angles
KEY: angles | interior | consecutive MSC: DOK 1 NOT: 978-0-547-31534-8

51. ANS: D PTS: 1 DIF: Level B REF: MGEH0024
NAT: NT.CCSS.MTH.10.9-12.G.CO.1 TOP: Lesson 3.1 Identify Pairs of Lines and Angles
KEY: corresponding angles MSC: DOK 1 NOT: 978-0-547-31534-8

52. ANS: B PTS: 1 DIF: Level B REF: MCT90022
LOC: NCTM.PSSM.00.MTH.9-12.GEO.1.a
TOP: Lesson 3.2 Use Parallel Lines and Transversals
KEY: vertical | angle | parallel | transversal | congruent | corresponding
MSC: DOK 3 NOT: 978-0-547-31534-8

53. ANS: C PTS: 1 DIF: Level B REF: MHGM0071
TOP: Lesson 10.1 Use Properties of Tangents KEY: solve | circle | tangent | Pythagorean
MSC: DOK 2 NOT: 978-0-547-31534-8

54. ANS: A PTS: 1 DIF: Level B REF: MGEH0022
NAT: NT.CCSS.MTH.10.9-12.G.CO.1 TOP: Lesson 3.1 Identify Pairs of Lines and Angles
KEY: angles | exterior | alternate MSC: DOK 1 NOT: 978-0-547-31534-8

55. ANS: D PTS: 1 DIF: Level B REF: ALS10383
LOC: NCTM.PSSM.00.MTH.9-12.ALG.1.c
TOP: Lesson 3.4 Find and Use Slopes of Lines KEY: graph | slope
MSC: DOK 2 NOT: 978-0-547-31534-8

56. ANS: C PTS: 1 DIF: Level A REF: MLGE0444
TOP: Lesson 2.7 Prove Angle Pair Relationships KEY: angle | supplementary | linear pair
MSC: DOK 1 NOT: 978-0-547-31534-8

57. ANS: A PTS: 1 DIF: Level B REF: MHGM0060
NAT: NT.CCSS.MTH.10.9-12.G.CO.1 LOC: NCTM.PSSM.00.MTH.9-12.GEO.1.a
TOP: Lesson 1.5 Describe Angle Pair Relationships KEY: name | supplementary angles
MSC: DOK 1 NOT: 978-0-547-31534-8

58. ANS: C PTS: 1 DIF: Level A REF: MHGT0077
TOP: Lesson 1.1 Identify Points, Lines, and Planes KEY: identify | ray
MSC: DOK 1 NOT: 978-0-547-31534-8

59. ANS: A PTS: 1 DIF: Level B REF: MLGE0199
NAT: NT.CCSS.MTH.10.9-12.A.REI.3
LOC: NCTM.PSSM.00.MTH.9-12.PRS.3 | NCTM.PSSM.00.MTH.9-12.REP.2
TOP: Lesson 2.7 Prove Angle Pair Relationships
KEY: supplementary angles | vertical angles MSC: DOK 2
NOT: 978-0-547-31534-8

60. ANS: C PTS: 1 DIF: Level B REF: MIM20665
LOC: NCTM.PSSM.00.MTH.9-12.GEO.1.a
TOP: Lesson 3.2 Use Parallel Lines and Transversals KEY: angle | measure | alternate interior
MSC: DOK 2 NOT: 978-0-547-31534-8

61. ANS: C PTS: 1 DIF: Level B REF: MALG0658
TOP: Lesson 3.4 Find and Use Slopes of Lines KEY: line | slope
MSC: DOK 2 NOT: 978-0-547-31534-8

62. ANS: D PTS: 1 DIF: Level A REF: MLGE0166
TOP: Lesson 10.1 Use Properties of Tangents KEY: circle | chord | endpoint | segment
MSC: DOK 1 NOT: 978-0-547-31534-8

63. ANS: A PTS: 1 DIF: Level B REF: MLGE0038
NAT: NT.CCSS.MTH.10.9-12.G.GPE.5 TOP: Lesson 3.5 Write and Graph Equations of Lines
KEY: line | slope | perpendicular MSC: DOK 2 NOT: 978-0-547-31534-8

64. ANS: C PTS: 1 DIF: Level B REF: MLGE0188
TOP: Lesson 1.3 Use Midpoint and Distance Formulas
KEY: distance formula | coordinate geometry MSC: DOK 2
NOT: 978-0-547-31534-8

65. ANS: C PTS: 1 DIF: Level B REF: MGEO0044
NAT: NT.CCSS.MTH.10.9-12.G.CO.1 TOP: Lesson 1.5 Describe Angle Pair Relationships
KEY: angle measure | complementary angles MSC: DOK 1
NOT: 978-0-547-31534-8

66. ANS: C PTS: 1 DIF: Level B REF: MLGE0207
LOC: NCTM.PSSM.00.MTH.9-12.GEO.1.a
TOP: Lesson 3.2 Use Parallel Lines and Transversals KEY: angles | parallel lines | transversal
MSC: DOK 3 NOT: 978-0-547-31534-8

67. ANS: B PTS: 1 DIF: Level B REF: MC100096
LOC: NCTM.PSSM.00.MTH.9-12.PRS.2 TOP: Lesson 10.2 Find Arc Measures
KEY: word | angle | real-life | measure MSC: DOK 1 NOT: 978-0-547-31534-8

68. ANS: D PTS: 1 DIF: Level B REF: MIM20426
LOC: NCTM.PSSM.00.MTH.9-12.GEO.1.a

TOP: Lesson 3.2 Use Parallel Lines and Transversals
KEY: complementary | supplementary | alternate interior MSC: DOK 2
NOT: 978-0-547-31534-8

69. ANS: A PTS: 1 DIF: Level A REF: MLGE0084
TOP: Lesson 1.1 Identify Points, Lines, and Planes KEY: points | collinear
MSC: DOK 1 NOT: 978-0-547-31534-8

70. ANS: C PTS: 1 DIF: Level A REF: MLGE0178
LOC: NCTM.PSSM.00.MTH.9-12.ALG.2.b
TOP: Lesson 2.5 Reason Using Properties from Algebra
KEY: equality | symmetric | transitive | reflexive MSC: DOK 1
NOT: 978-0-547-31534-8