Honors Review Quiz 11 (50 questions)

Name _____

You may write on this sheet, but put all final answers on the Scantron.

_____1. If C is between X and Y with CX = 8n – 4 and CY = 2n + 10, what is XY?
A. 6n – 6 B. 6n – 14 C. 10n + 6 D. 10n – 6

_____2. What is the midpoint of a line that has endpoints at (-2, -3) and (8, -1)?
A. (6, -4) B. (6, -2) C. (3, -2) D. (-6,-4)

_____3. If C is between X and Y with XY = 6n – 4 and CY = n + 1, what is CX?
A. 5n – 3 B. 5n – 5 C. 7n – 3 D. 7n – 5

_____4. What are the measures of two supplementary angles if the difference of their measures is $8°$?
A. 39, 51 B. 76, 84 C. 86, 94 D. 41, 49

_____5. A is at (-1, 2) and B is at (3, 8). What are the coordinates of the midpoint of $\overline{AB}$?
A. (1, 4) B. (1, 5) C. (2, 5) D. (2, 4)

_____6. If the radius of a circle is 20 cm, what is the circumference? (Ignore units)
A. 20π B. 40π C. 80π D. 400π

_____7. What is the area of a circle with a radius of 6 cm? (Ignore units)
A. 6π B. 12π C. 18π D. 36π

_____8. Which description best describes a stop sign?
A. a regular convex octagon B. an irregular concave octagon
C. a regular concave octagon D. an irregular convex octagon

_____9. Which equation would be perpendicular to the $y = -\frac{1}{7}x + 3$?
A. $y = -\frac{1}{7}x - 3$ B. $y = \frac{1}{7}x + 3$ C. y = 7x – 5 D. None of the above

_____10. If you walk 35 miles due North and then 48 miles due West, rounded to the nearest mile how far are you from your starting point?
A. 13 miles B. 33 miles C. 59 miles D. 61 miles

_____11. If $\angle A$ and $\angle B$ are a linear pair with $\angle A$ = n + 40 and $\angle B$ = 9n + 20, what is the measurement of $\angle A$?
A. 22 B. 12 C. 52 D. 42

_____12. If $\angle A$ and $\angle B$ are vertical angles with $\angle A$ = n + 60 and $\angle B$ = 2n + 10, what is the measurement of $\angle A$?
A. 110 B. 80 C. 20 D. None of the above

_____13. Let p represent the statement "x is not a real number" and q represent "x is an integer." What would the symbolic language be for "If x is not a real number, then x is not n integer"?
A. ~p → q B. p → ~q C. ~q → p D. ~q → ~p

_____14. Consider the statement: "If an angle is 90 degrees, it is a right angle." Is the converse of this statement true or false?
A. True B. False

_____15. The inverse of "if you are old, you have a big head" is
" if you don't have a big head, then you are not old."
A. True B. False

_____16. The contrapositive of "if you have a dog, you like cats" is
"if you don't like cats, you love dogs."
A. True B. False

_____17. "If you like dogs, you like cats" is represented by p → q. What would be the symbolic representation of "if you don't like cats, you like dogs"?
A. ~p → q B. p → ~q C. ~q → p D. ~q → ~p

_____18. "If you have a laptop, then you have a computer" is represented by p → q. What is the symbolic representation of "If you have a computer, then you don't have a laptop"?
A. q → p B. p → ~q C. ~q → p D. q → ~p

_____19. Let p represent $\sqrt{11}$ = z, and let q represent z is a rational number. What is a symbolic representation of the statement:
"If $\sqrt{11}$ *= z, then z is not a rational number"*?
A. q → p B. p → ~q C. ~q → p D. q → ~p

_____20. If AB = 6 and AB + BC = 10, then 6 + BC = 10 demonstrates what property?
A. Subtraction B. Addition C. Substitution D. Symmetric

_____21. If $\Delta ABC \cong \Delta ERT$ with AB = 10, BC = 13, $\angle A = 39°$, and $\angle R = 88°$, what is RT?
A. 39° B. 88° C. 10 D. 13

_____22. If AB + BC = XY + BC, then AB = XY demonstrates what property?
A. Subtraction B. Addition C. Substitution D. Symmetric

_____23. In my class, everyone plays either golf or tennis. 14 play golf and 8 play tennis. If 3 play both tennis and golf, how many kids are in my class?
A. 17 B. 19 C. 22 D. 25

_____24. There are 30 kids who play either soccer or baseball. 4 of the 30 kids play both soccer and baseball. If the soccer team has 18 members, how many kids are on the baseball team?
A. 12 B. 16 C. 20 D. 26

_____25. There are 14 kids in band and 16 in chorus. If 4 of these kids are in both chorus and band, how many total kids are in either band or chorus?
A. 26 B. 28 C. 30 D. 34

_____26. What is the perimeter of a square with an area of 25 cm^2?

A. 20 cm B. 25 cm C. 50 cm D. 625 cm

_____27. What equation would be perpendicular to y = 2x + 5

A. y = -x – 5 B. y = -2x – 5 C. y = $-\frac{1}{2}$x – 5 D. y = $\frac{1}{2}x$ - 5

_____28. What is the distance from (1, 5) to (7, 6)?

A. $\sqrt{37}$ B. $\sqrt{23}$ C. $\sqrt{24}$ D. None of the above

_____29. If BCDE is congruent to OPQR, then $\overline{DE}$ is congruent to _____?

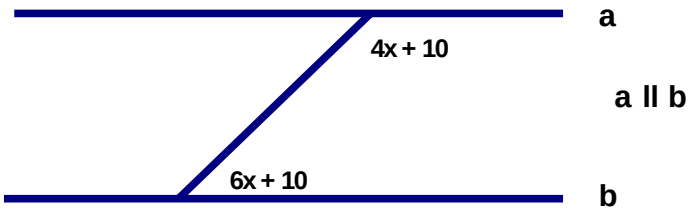
A. $\overline{PR}$ B. $\overline{PQ}$ C. $\overline{QR}$ D. $\overline{OP}$

_____30. Line a and line b are perpendicular to each other. If line a has a slope of 4, what is the slope of line b?

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

_____31. What is the value of x in the figure below?

A. 15° B. 16° C. 19° D. 0°



_____32. If the diagonal distance of a rectangle is 97 cm and one of the sides is 65 cm, what is the other side length?

A. 71 cm B. 72 cm C. 117 cm D. 118 cm

_____33. In $\Delta ABC, \angle A = 3n, \angle B = 5n - 30, \angle C = 2n + 10$. What is the measurement of $\angle A$?

A. 20° B. 40° C. 60° D. 80°

_____34. Give the equation in slope intercept form that goes through (2, 7) and has a slope of 4.

A. y = 4x – 26 B. y = 4x + 1 C. y = -4x +15 D. y = 4x – 1

_____35. What would be the slope of the line that is perpendicular to y = 5x + 4?

A. 5 B. -5 C. $\frac{1}{5}$ D. $-\frac{1}{5}$

_____36. Give the equation in slope intercept form that goes through (3, 4) and (5, 10).

A. y = 3x – 4 B. y = -3x + 13 C. y = 3x – 5 D. y = $\frac{1}{3}x + 3$

_____37. In $\Delta ABC, \angle A = 3n, \angle B = 5n - 30, \angle C = 2n + 10$. What is the measurement of $\angle A$?

A. 20° B. 40° C. 60° D. 80°

_____38. If ΔABC is an isosceles triangle with AB = BC, which statement must be true?
A. $\angle C = \angle B$ B. $\angle A = \angle B$ C. $\angle A = \angle C$ D. AC = B

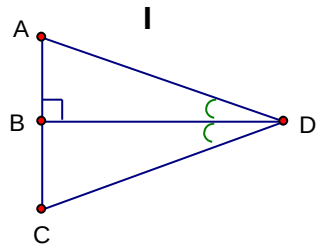
_____39. If $\Delta ABC \cong \Delta XYZ$, which of the following must be true?
A. $\angle A = \angle Z$ B. AC = XY C. XZ = BC D. None of the above

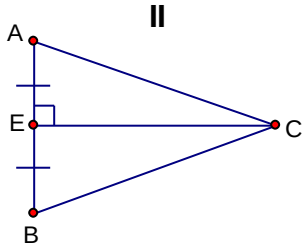
_____40. If ΔABC is an isosceles triangle with AC = BC and $\angle A = 40°$, what is $\angle B$?
A. 40° B. 70° C. 80° D. None of the above

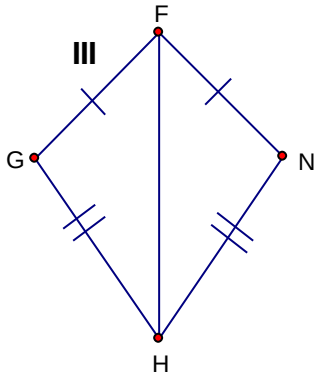
_____41. If $\Delta ABC \cong \Delta XYZ$, AB = 38, YZ = 28, and XY = 5x + 8, what is the value of x?
A. 30 B. 20 C. 6 D. 4

_____42. If $\Delta RST \cong \Delta HIJ, \angle R = 97°, \angle J = 37°,$ and $\angle S = 4x + 14$, what is the value of x?
A. 10 B. 32 C. 46 D. 8

_____43. If in ΔCWH, $\angle W = \angle H$ what can you conclude?
A. CW = WH B. CH = CW C. CH = WH D. $\angle C = 100°$



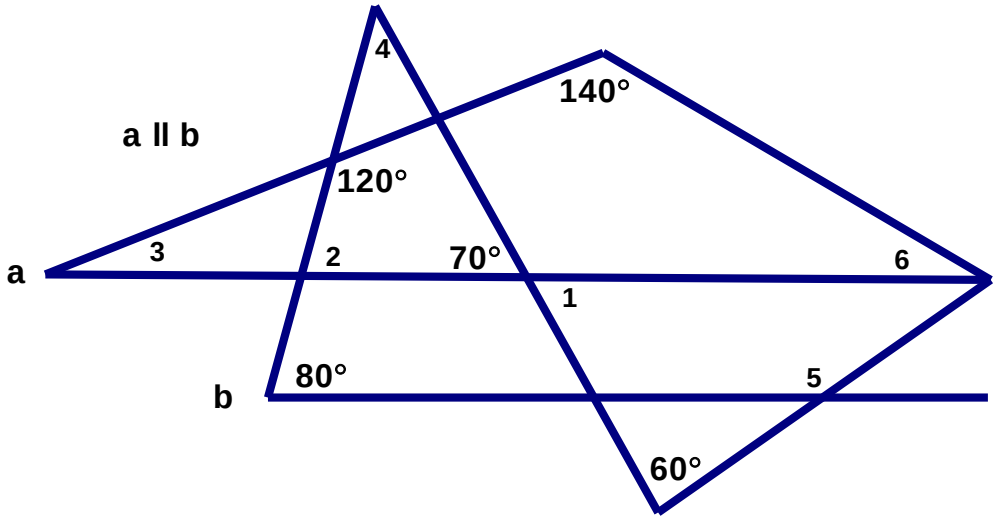




_____44. In picture I above, what allows you to immediately conclude that $\Delta ABD \cong \Delta CBD$?
A. ASA B. SAS C. AAA D. SAA

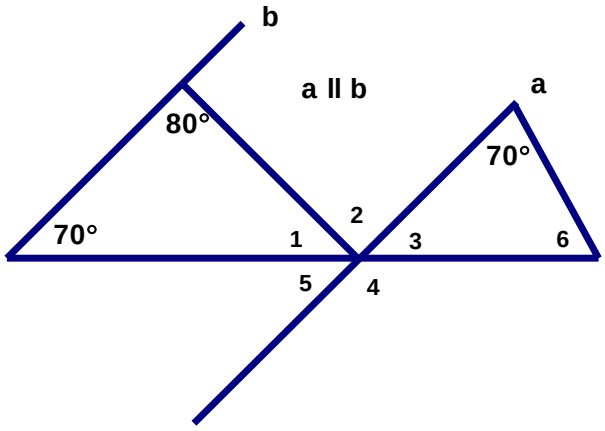
_____45. In picture II above, what allows you to immediately conclude that $\Delta AEC \cong \Delta BEC$?
A. ASA B. SAS C. AAA D. SAA

_____46. In picture III above, what allows you to immediately conclude that $\Delta FGH \cong \Delta FNH$?
A. SSS B. SAS C. AAA D. SAA



_____47. What is the measurement of $\angle 3$ above?

A. 20° B. 30° C. 70° D. 80°



_____48. What is the measurement of $\angle 6$ above?

A. 20° B. 30° C. 40° D. 70°

_____49. Points A, B, C, D, E, and X are all collinear (lie on the same line).
Consider the given facts:

C is the midpoint of $\overline{AB}$ D is the midpoint of $\overline{XE}$ X is the midpoint of $\overline{AC}$

E is the midpoint of $\overline{XC}$ DE = 4 cm

What is AB?

A. 24 cm B. 36 cm C. 48 cm D. 64 cm

_____50. If $\angle ABC = 96°$, what is $\angle YBL$ given the following facts:

$\overrightarrow{BX}$ bisects $\angle ABC$ $\overrightarrow{BD}$ bisects $\angle ABX$ $\overrightarrow{BL}$ bisects $\angle XBC$

$\overrightarrow{BN}$ bisects $\angle ABD$ $\overrightarrow{BY}$ bisects $\angle NBD$

A. 24° B. 48° C. 54° D. 62°