Geometry Review Quiz 12 (40 questions)

Name _____

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

_____1. 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

_____2. 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)

_____3. 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

_____4. 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)

_____5. 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

_____6. Which equation would be perpendicular to the $y = -\dfrac{1}{7}x + 3$?

A. $y = -\dfrac{1}{7}x - 3$ B. $y = \dfrac{1}{7}x + 3$ C. y = 7x – 5   D. None of the above

_____7. 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

_____8. 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

_____9. 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

_____10. 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

_____11. "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

_____12. "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

_____13. 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. $q \rightarrow p$ 　　　　　B. $p \rightarrow \sim q$ 　　　　　C. $\sim q \rightarrow p$ 　　　　　D. $q \rightarrow \sim p$

_____14. If AB = 6 and AB + BC = 10, then 6 + BC = 10 demonstrates what property?
A. Subtraction 　　　B. Addition 　　　C. Substitution 　　　D. Symmetric

_____15. If $\triangle ABC \cong \triangle ERT$ with AB = 10, BC = 13, $\angle A = 39°$, and $\angle R = 88°$, what is RT?
A. 39° 　　　　　B. 88° 　　　　　C. 10 　　　　　D. 13

_____16. 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

_____17. 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

_____18. 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

_____19. 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. $y = \frac{1}{2}x - 5$

_____20. What is the distance from (1, 5) to (7, 6)?
A. $\sqrt{37}$ 　　　　　B. $\sqrt{23}$ 　　　　　C. $\sqrt{24}$ 　　　　　D. None of the above

_____21. If BCDE is congruent to OPQR, then $\overline{DE}$ is congruent to _____?
A. $\overline{PR}$ 　　　　　B. $\overline{PQ}$ 　　　　　C. $\overline{QR}$ 　　　　　D. $\overline{OP}$

_____22. 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. $-\frac{1}{4}$

_____23. What is the value of x in the figure below?
A. 15° 　　　　　B. 16° 　　　　　C. 19° 　　　　　D. 0°

a

4x + 10

a ll b

6x + 10

b
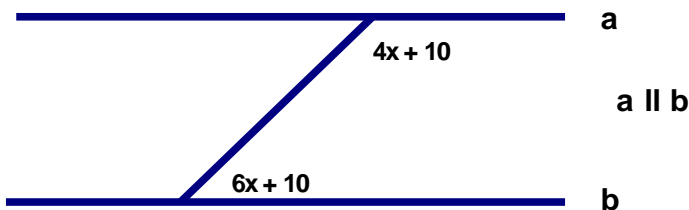
_____24.   In $\triangle ABC, \angle A = 3n, \angle B = 5n - 30, \angle C = 2n + 10$. What is the measurement of $\angle A$?
A. $20°$ B. $40°$ C. $60°$ D. $80°$

_____25.   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. $y = 4x - 1$

_____26.   What would be the slope of the line that is perpendicular to $y = 5x + 4$?
A. 5   B. -5   C. $\dfrac{1}{5}$ D. $-\dfrac{1}{5}$

_____27.   If $\triangle ABC$ 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

_____28.   If $\triangle ABC \cong \triangle XYZ$, which of the following must be true?
A. $\angle A = \angle Z$ B. AC = XY   C. XZ = BC   D. None of the above

_____29.   If $\triangle ABC$ 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

_____30.   If $\triangle ABC \cong \triangle XYZ$, AB = 38, YZ = 28, and XY = 5x + 8, what is the value of x?
A. 30   B. 20   C. 6   D. 4

_____31.   If in $\triangle CWH$, $\angle W = \angle H$ what can you conclude?
A. CW = WH   B. CH = CW   C. CH = WH   D. $\angle C = 100°$
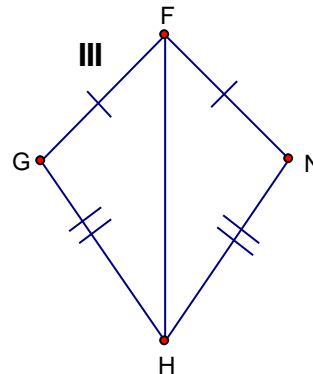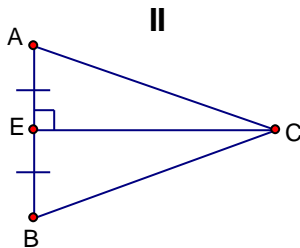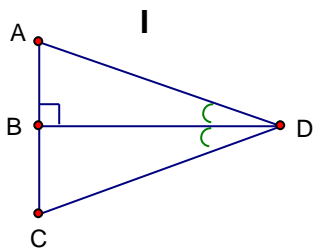
_____32.   In picture I above, what allows you to immediately conclude that $\triangle ABD \cong \triangle CBD$?
A. ASA   B. SAS   C. AAA   D. SAA

_____33.   In picture II above, what allows you to immediately conclude that $\triangle AEC \cong \triangle BEC$?
A. ASA   B. SAS   C. AAA   D. SAA

_____34.   In picture III above, what allows you to immediately conclude that $\triangle FGH \cong \triangle FNH$?
A. SSS   B. SAS   C. AAA   D. SAA
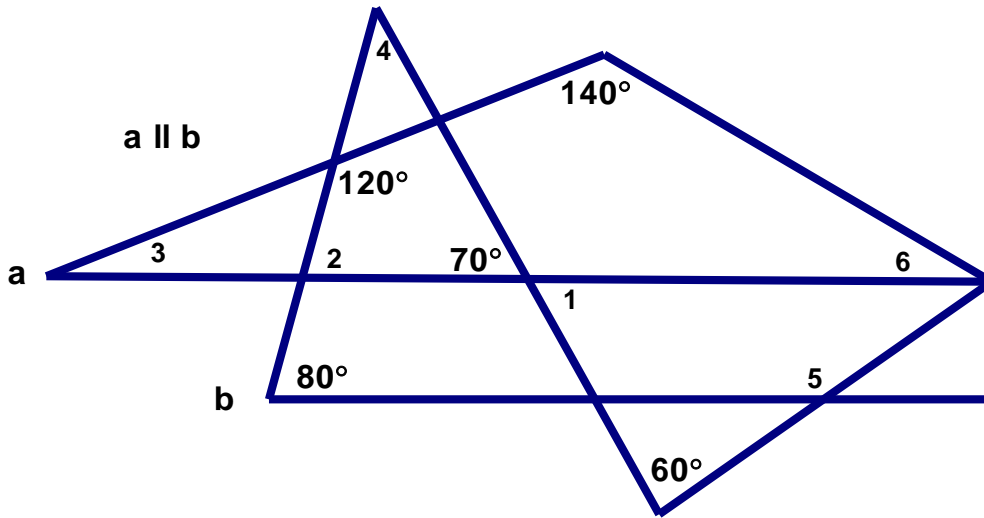
_____35.   What is the measurement of ∠3 above?
        A. 20°   B. 30°   C. 70°   D. 80°

_____36.   What is the measurement of ∠5 above?
        A. 1 20°   B. 1 30°   C. 140°   D. 150°
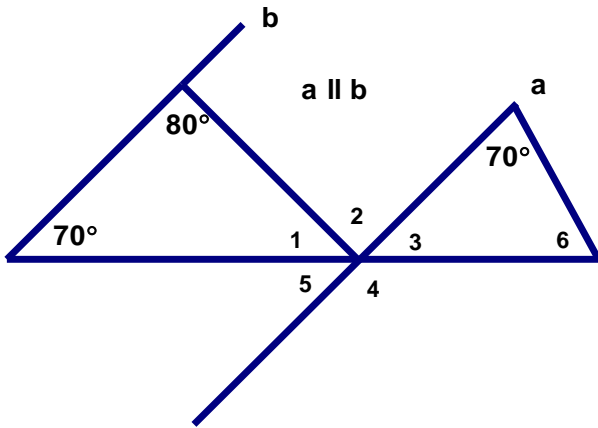
_____37.   What is the measurement of ∠1 above?
        A. 20°   B. 30°   C. 40°   D. 70°

_____38.   What is the measurement of ∠6 above?
        A. 20°   B. 30°   C. 40°   D. 70°

_____39.   A line has an endpoint at (2, 6) and a midpoint at (4, 10). What would the other endpoint be?
        A. (3, 8)   B. (6, 16)   C. (6, 14)   D. (3, 16)

_____40.   Which of the following doesn't prove congruency?
        A. SSS   B. SSA   C. ASA   D. AAS