# Geometry Review Quiz (Chapters 1-7) Lookalike

Name _____

_____ 1. If D is between A and B with AD = n – 2 , BD = 2n + 4, and AB = 83, what is BD?

_____ 2. If the diagonal distance of a rectangle is 26 cm and one of the sides is 24 cm, what is the other side length?

_____ 3. What is the midpoint of a line that has endpoints at (10, -4) and (6, -2)?

_____ 4.   Point A is at (4, 6) and B is at (12, 10). If B is the midpoint of $\overline{AC}$, what are the coordinates of C?

_____ 5. If C is between X and Y with CX = 8n – 4 and CY = 2n + 10, what is XY?

_____ 6. $\overrightarrow{BY}$ bisects $\angle ABC$. If $\angle ABY = 4n+6$, what is $\angle ABC$?

_____ 7. If $\angle A$ and $\angle B$ are a linear pair with $\angle A = n + 40$ and $\angle B = n + 60$, what is the measurement of $\angle B$?

_____ 8. Consider the statement "If you are nice, you have a lot of friends."
"*If you don't have a lot of friends, you are not nice*" is the ____ of above.
A. Converse   B . Inverse   C. Contrapositive   D. Sublimation

_____ 9. "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"?

_____ 10. If AB = 6 and AB + BC = 10, then 6 + BC = 10 demonstrates what property?

_____ 11. 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?

_____ 12. What is the area of a square whose perimeter is 40 cm?

_____ 13. If the perimeter of a triangle is 40 cm with sides of length 3n, 2n + 12, and 5n – 2, what is the value of n?

_____ 14. What is the value of x in the figure below?

6x - 20

a

a ll b

4x + 10

b
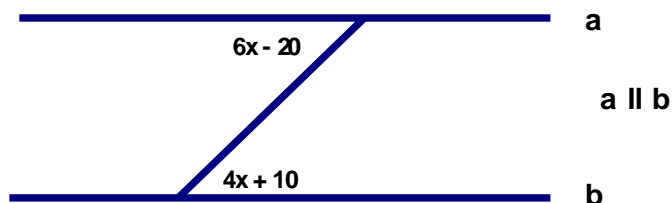
_____ 15. What is the distance from (-2, 5) to (4, 8)? Round your answer to nearest tenth.

_____ 16. "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"?

_____ 17. If ∠A and ∠B are vertical angles with ∠A = 3n + 40 and ∠B = n + 60, what is the measurement of ∠B?

_____ 18. What is the value of x in the right triangle to the right?

20   12
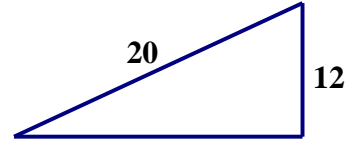
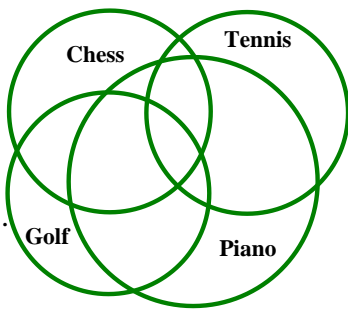19. Give the shorthand notations for

_____ A) AND

_____ B) THEREFORE

_____ C) OR

_____ D) IF AND ONLY IF

_____ 20. Which set of side lengths would be a right triangle?
A. 11, 19, 22   B. 8, 12, 6   C. 20, 15, 11   D. 15, 17, 8

_____ 21. A dog is tied to pole with a rope that is 25 feet long. How much area does the dog have to run around in?

Chess   Tennis   Golf   Piano

22. Darken the section that represents the kids who play chess and piano, but nothing else.

23.   Find the indicated angles in the figure below.

∠1 = _____

∠2 = _____

∠3 = _____

a

a ∥ b

b

2

50°

3

30°

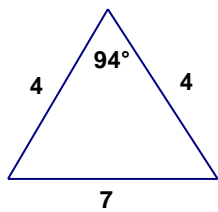40°   1   70°
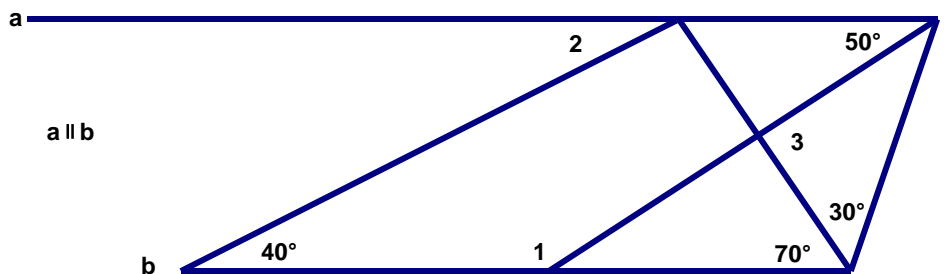
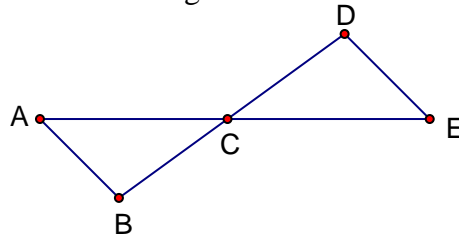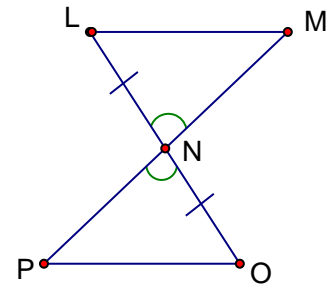| Figure 1	Figure 2	Figure 3

_____ 24. What type of triangle is pictured in Figure 1 above?

_____ 25. In figure 2 above, $\overline{AE}$ and $\overline{BD}$ bisect each other at point C.
What postulate would be used to prove that $\triangle ABC \cong \triangle EDC$?

_____ 26. In figure 3 above, what additional information is needed to prove
that $\triangle MNL$ is congruent to $\triangle PNO$ by AAS?

_____ 27. If $\triangle RST \cong \triangle HIJ$, $\angle R = 97°$, $\angle J = 37°$, and $\angle S = 4x+14$, what is the value of x?

_____ 28. What is the slope between (2, 3) and (4, 13)?

_____ 29. Give the equation of the line, in slope intercept form, that is perpendicular to
y = 2x – 5 and passes through the point (2, 8).

_____ 30. Which set of numbers could be a measure of the sides of a triangle?
    A. 2, 4, 2   B. 20, 4, 15   C. 4, 6, 1   D. 5, 7, 5

_____ 31. In $\triangle RST$ $\angle R = x+10$, $\angle S = x+5$, and $\angle T = 3x-35$.
Choose the list of sides of $\triangle RST$ that are ordered correctly from longest to shortest.
    A. $\overline{RS}, \overline{ST}, \overline{TR}$ B. $\overline{ST}, \overline{RS}, \overline{TR}$ C. $\overline{TR}, \overline{RS}, \overline{ST}$ D. $\overline{ST}, \overline{TR}, \overline{RS}$

_____ 32. A = (4, 6), B= (1, 7), and C = (-2, -2) in $\triangle ABC$
What are the coordinates of X if $\overline{CX}$ is a median of $\triangle ABC$?

_____ 33. A = (3, 4), B = (2, -1), and C = (9, 2) in $\triangle ABC$. Which angle is largest?

_____ 34. What is the sum of the measures of the interior angles of an octagon?

_____ 35. How many degrees is each interior angle of a regular hexagon?

_____ 36. If the measure of each exterior angle of a regular polygon is 10°,
how many sides does the polygon have?

_____ 37. If ABCD is a parallelogram with $\angle A = x$ and $\angle D = 2x-3$, what is the value of x?

_____ 38. What is C in parallelogram ABCD if A = (2, 0), B = (8, 0), and D = (2, 9)?

_____ 39. Diagonals are always perpendicular in a
A. parallelogram   B. trapezoid   C. rhombus   D. rectangle

_____ 40. Solve for n: $\dfrac{4}{n+2} = \dfrac{7}{2n+3}$

_____ 41. What is the value for x in Figure 1 below?

_____ 42. What is the value for x in Figure 2 below?

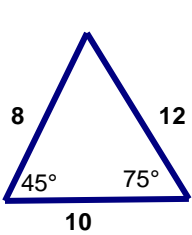_____ 43. What is the value for x in Figure 3 below if LM = 40 and lines are parallel?
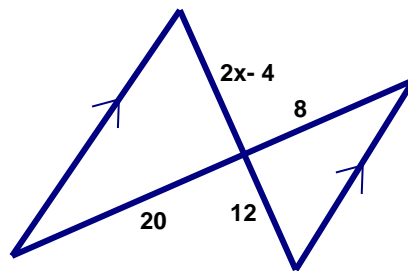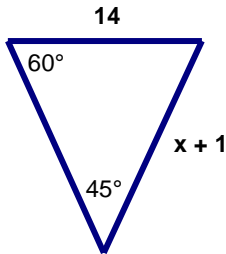
Figure 1   Figure 2   Figure 3

Figure 1: Triangle with sides 8 and 12, base 10, angles 45° and 75°. Second triangle with top side 14, angle 60°, side x + 1, angle 45°.

Figure 2: Crossing lines labeled 2x- 4, 8, 20, 12.

Figure 3: Triangle with vertices L and M, labels x, 15, 21.