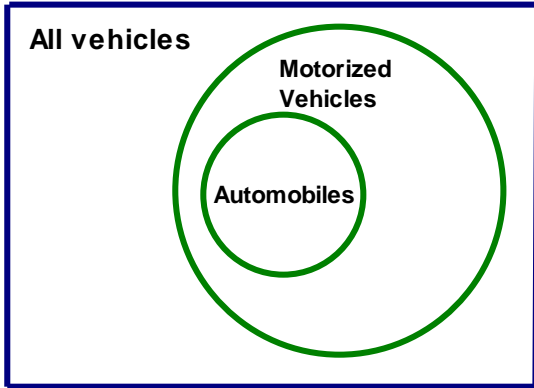# Honors Geometry Review Quiz 10

Name _____

Put all answers in the blank to the left of the question.

_____1. 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

_____2. A line segment has an endpoint at (3, 2). If the midpoint of the line segment is (6, 1), what are the coordinates of the point at the other end of the line segment?
A. (4.5, 1.5)   B. (4.5, 2)   C. (9, 0)   D. (9, 3)

_____3. Let *p* represent $x^2 = 21$ and let *q* represent x is not a whole number.
Which is a representation of "If x is a whole number, then $x^2 \neq 21$."
A. p → ~q   B. ~q → ~p   C. ~p → ~q   D. ~p → q

_____4. If $\triangle ABC$ is an isosceles triangle with AB = BC, which statement must be true?
A. $\angle A = \angle B$ B. $\angle C = \angle B$ C. AC = BC   D. None of the above

_____5. According to Venn diagram 1 on the back of this page, which is true?
A. All automobiles are motorized vehicles   C. All motorized vehicles are automobiles
B. Some automobiles are not motorized vehicles.   D. No automobiles are motorized vehicles.

_____6. If the conditional statement "If you have a laptop, then you have a computer" is represented by $p \rightarrow q$, what is the symbolic representation of "If you have a computer, then you do not have a laptop"?
A. $q \rightarrow \sim p$ B. $\sim q \rightarrow p$ C. $p \rightarrow \sim q$ D. $\sim q \rightarrow \sim p$

_____7. If AB + NP = BC + NP, then AB = BC demonstrates what property?
A. Subtraction   B. Addition   C. Substitution   D. Symmetric

_____8. According to Venn diagram 2 on the back of this page, what is true?
A. All isosceles triangles are also equilateral triangles.
B. All equilateral triangles are also isosceles triangles.
C. Some equilateral triangles are also isosceles triangles.
D. No isosceles triangles are equilateral triangles.

_____9. Which could be the side lengths of a right triangle?
A. 12, 15, 25   B. 11, 60, 61   C. 1, 2, 3   D. 27, 31, 37

_____10. 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

Venn diagram 1

All vehicles

Motorized
Vehicles

Automobiles

Venn diagram 2

Isosceles
Triangles

Equilateral
Triangles