## Name:

$\qquad$

## Triangle Inequality

1) Determine whether it is possible to draw a triangle with sides having the given measures. If possible, write yes. If not possible, write no and make a sketch demonstrating why it is not possible.
2) $3 \mathrm{~cm}, 4 \mathrm{~cm}, 5 \mathrm{~cm}$
3) $4 \mathrm{~m}, 5 \mathrm{~m}, 9 \mathrm{~m}$
4) $5 \mathrm{ft}, 6 \mathrm{ft}, 12 \mathrm{ft}$
5) $3.5 \mathrm{~cm}, 4.5 \mathrm{~cm}, 7 \mathrm{~cm}$
6) If 54 and 48 are the lengths of two sides of a triangle, what is the range of possible values for the length of the third side?
7) List the sides in order from least to greatest

8) List the angles in order from smallest to largest

9) Name the shortest and longest sides of the triangle

10) Name the shortest and longest sides of the triangle

11) Name the smallest and largest angles of the triangle

