Name: _____ Per: _____ Date: _____

Serafino · Geometry M T W R F

Classifying Triangles in the XY Plane

Practice

Directions: For each set of three points,
a) find the exact length of each side, in simplest radical form.
b) find the exact perimeter of the triangle (in simplest radical form)
c) classify the triangle as right or oblique.

1.	W (0, 4)	H (−5, 1)	O (−2, −4)
2.	L (−4, 3)	V (1, 9)	S (−1, −6)
3.	I (−6, −2)	N (1, 7)	A (5, 1)
4.	P (−1, 2)	I (4, 2)	N (3, −1)

1. a) $WH = \sqrt{34},\ HO = \sqrt{34},\ WO = 2\sqrt{17}$ b) $P = 2\sqrt{17}, +2\sqrt{34}$ c) Right
2. a) $LV = \sqrt{61},\ VS = \sqrt{229},\ LS = 3\sqrt{10}$ b) $P = \sqrt{61} + \sqrt{229} + 3\sqrt{10}$ c) Oblique
3. a) $IN = \sqrt{130},\ NA = 2\sqrt{13},\ IA = \sqrt{130}$ b) $P = 2\sqrt{130} + 2\sqrt{13}$ c) Oblique
4. a) $PI = 5,\ IN = \sqrt{10},\ PN = 5$ b) $P = 10 + \sqrt{10}$ c) Right