

Handout #11A Geometric Shapes from Digital Sums

Multiples of:

$$1 = \text{_____, _____, _____, _____, _____, _____, _____, _____, _____, _____, _____}$$

$$2 = \text{_____, _____, _____, _____, _____, _____, _____, _____, _____, _____, _____}$$

$$3 = \text{_____, _____, _____, _____, _____, _____, _____, _____, _____, _____, _____}$$

$$4 = \text{_____, _____, _____, _____, _____, _____, _____, _____, _____, _____, _____}$$

$$5 = \text{_____, _____, _____, _____, _____, _____, _____, _____, _____, _____, _____}$$

$$6 = \text{_____, _____, _____, _____, _____, _____, _____, _____, _____, _____, _____}$$

$$7 = \text{_____, _____, _____, _____, _____, _____, _____, _____, _____, _____, _____}$$

$$8 = \text{_____, _____, _____, _____, _____, _____, _____, _____, _____, _____, _____}$$

$$9 = \text{_____, _____, _____, _____, _____, _____, _____, _____, _____, _____, _____}$$

The numbers on the circle correlate to the digital sum. Begin on the circle with the number that is the same as the first sum and construct a line segment from the first sum to the second sum and continue creating line segments until you come back to the first digital sum. A geometric shape will be created. What does it look like? How many vertices does your shape have? Can you find its perimeter? How many different patterns can be created from the digital sums of the numbers 1 to 9? Were you surprised by how few patterns can be created?