

Name: _____ Hour: _____

1) Identify the common 2nd difference and the next term for each of these quadratic sequences:

a) 1, 4, 9, 16, ... 2 nd difference: _____ next term: _____	b) 6, 12, 20, 30, ... 2 nd difference: _____ next term: _____
c) -3, 0, 4, 9, ... 2 nd difference: _____ next term: _____	d) 12, 56, 130, 234, ... 2 nd difference: _____ next term: _____
e) 5, 35, 81, 143, ... 2 nd difference: _____ next term: _____	f) -6, 5, 40, 99, ... 2 nd difference: _____ next term: _____

2) Identify if each sequence is *linear*, *exponential*, *quadratic*, or *neither*?

a) 6, 12, 24, 48, ...	b) -10, -12, -14, -16, ...
c) 3, 7, 12, 18, ...	d) 8, 8, 8, 8, ...
e) 1, 2, 4, 8, ...	f) 7, 12, 27, 32, ...
g) -4, -16, -64, -256, ...	h) 2, 16, 36, 64, ...