**Chapter 1 –Extra Practice - SOLUTIONS**

**Arithmetic Sequences**

 **1. a)** not arithmetic **b)** arithmetic; *d* = $\frac{1}{2}$, *tn* = 1$\frac{1}{2}$ + $\frac{1}{2}$*n*

**c)** not arithmetic **d)** arithmetic; *d* = -3*x*2, *t*n = *x*2 -3*nx*2

 **2. a)** 1, -3, -7, -11, -15 **b)** -6, 0, 6, 12, 18, 24

 **c)** 5*m*, 5*m* + 3, 5*m* + 6, 5*m* + 9, 5*m* + 12 **d)** *c* + 1, 2*c* – 1, 3*c* – 3, 4*c* – 5, 5*c* – 7

 **3.** **a)** *t*1 = 4, *d* = 3 **b)** *t*1 = 42, *d* = 2 **c)** *t*1 = -19, *d* = 7 **d)** *t*1 = 67, *d* = -5

 **4.** **a)** 64 **b)** 56 **b)** 32 **d)** 28

 **5.** *x* = 2

**Arithmetic Series**

 **6. a)** 3 + 7 + 11 + 15 + 19 b) $t\_{1}=7$; *d* = 4 c) S20 = - 470