correct answers to (this version of) the intermediate test (TOETS2) AESB2120 Oct 2nd, 2014

1 a)

2 amplitude = 1/2 and phase = 0 for f = 0 Hz, amplitude = 1 and phase = -pi/3 for f = 1.5 Hz, and amplitude = 1/2 and phase = -4/3 pi (or + 2/3 pi) for f = 7 Hz

3 a)

4 a)

5 b)

6 c)

7 a)

8 a)

9 a)

10 c)

12 a0 = A/2, an = 0, bn = - 2A/(n pi) for n odd and bn = 0 for n even

11 b)