



Expertise
and insight
for the future

Name

Course name TX00XXXX-1337
Assignment name

Metropolia University of Applied Sciences

Bachelor of Engineering

Information Technology

24 February 2020

Solution

1.

(a)

Equation of the signal is given by:

$$v(t) = \frac{2A}{\pi} \left[\sin(2\pi f_0 t) - \frac{\sin(2\pi \cdot 3f_0 t)}{3^2} + \frac{\sin(2\pi \cdot 5f_0 t)}{5^2} - \frac{\sin(2\pi \cdot 7f_0 t)}{7^2} + \frac{\sin(2\pi \cdot 9f_0 t)}{9^2} - \frac{\sin(2\pi \cdot 11f_0 t)}{11^2} + \dots \right] \quad (1)$$

Equation 1 shows ...

(b)

The gain of a reflector antenna is given by:

$$g = \frac{4\pi A_e}{\lambda^2} \quad (2)$$

Theory

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Etiam ante sem, tempus vitae eros nec, semper ultricies magna. Pellentesque porttitor vel dolor non convallis [1]. Quisque sed ante vitae elit consectetur sagittis ut a nulla. Sed convallis eu metus vitae ultricies. Nunc gravida massa eget erat sodales, vel aliquet enim elementum [2, 27].

Aliquam viverra est eu tempus luctus. Integer a facilisis lacus. Fusce id leo in lacus elementum suscipit sit amet vitae felis. Vestibulum eu libero scelerisque, dictum tortor eget, malesuada leo. Praesent egestas varius augue, et commodo nisl laoreet non. [3, 123–124.]

Donec pulvinar imperdiet sem in ornare. Aliquam condimentum et felis nec dignissim. In facilisis, enim ut ultricies pretium, lacus lorem tincidunt dui, eget eleifend ante tortor non felis [4, 392; 5, 211]. In tincidunt rhoncus venenatis. Aliquam eu efficitur mi, et congue mauris. Duis quis lacus eget ante gravida efficitur. Etiam nec sapien iaculis, consequat augue sit amet, euismod tellus. Vestibulum congue metus sed venenatis dapibus. Aenean quis nulla eu dolor hendrerit euismod ut molestie lorem. Nulla feugiat maximus massa non consequat. Donec dignissim venenatis est, lobortis eleifend lectus volutpat eget [4, 394; 2, 27; 6, 17; 7, 2].

References

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