

Task 1

wave speed = frequency x wavelength

$$v = \lambda \times f$$

The equation can be rearranged to change the subject.

Write the formula you would use to calculate 1) frequency and 2) wavelength.

1.
2.

Task 2

Complete the wave calculations table using the wave speed triangle.

	frequency (Hz)	wavelength (m)	speed (m/s)
a	500		1500
b		0.50	1200
c	1000	0.34	
d		0.03	300 million
e	150 million		300 million
f	20 000	0.015	

Answers

Task 1

frequency = wave speed \div wavelength

wavelength = wave speed \div frequency

$$f = v \div \lambda$$

$$\lambda = v \div f$$

Task 2

	frequency (Hz)	wavelength (m)	speed (m/s)
a	500	3	1500
b	2400	0.50	1200
c	1000	0.34	340
d	10 000 million	0.03	300 million
e	150 million	2	300 million
f	20 000	0.015	300