

EX: $\sqrt{2} \cos(2\pi\vec{n} \circ \vec{x}) = \sqrt{2} \cos(2\pi[x_1 + 2x_2])$ when $\vec{n} = (1,2)$

The distance between wave crests is

$$d = \frac{1}{|\vec{n}|} = \frac{1}{\sqrt{n_1^2 + n_2^2}} = \frac{1}{\sqrt{1+4}} = \frac{1}{\sqrt{5}}$$

PICT:

