

Simple Interest

$$I = \frac{PRT}{100}$$

where

I = simple interest

P = Principal invested

R = Annual Rate of Interest

T = Time in years

Ex Find the simple interest when £2500 is invested for 4 years at 3% per annum

$$I = \frac{2500 \times 3 \times 4}{100} = £300$$

Formula can be rearranged to give

$$100I = PRT$$

$$\therefore P = \frac{100I}{RT}$$

$$R = \frac{100I}{PT}$$

$$T = \frac{100I}{PR}$$

Ex £4000 was invested for 2 years and the simple interest received was £560. What was annual rate of interest.

$$R = \frac{100I}{PT} = \frac{100 \times 560}{(4000 \times 2)} = 7\%$$

Exercise

Find the missing quantity.

	I	P	R	T	
1)	£120	£600	4%	5 years	$\frac{600 \times 4 \times 5}{100}$
2)	£96	£800	3%	4 years	$\frac{100 \times 96}{800 \times 3}$
3)	£200	£1000	2%	10 years	$\frac{100 \times 200}{1000 \times 10}$
4)	£80	£500	2%	8 years	$\frac{100 \times 80}{2 \times 8}$
