

### Tax Calculations

1. A single person employee earns €51,000 in a particular year. Income tax is applied at the rate of 20% on the first €32,800 of earnings and 41% on the balance. If the employee has total tax credits of €1,650, what is the total tax due? What is the effective rate of taxation?
2. Repeat the above problem for a single person employee earning €24,300, assuming that the rates and credits remain the same.
3. A single person employee earns €48,100 per annum.

Calculate this person's tax liability under the following scenarios:

- (a) A rate of 20% on the first €32,800 of earnings and 41% on the balance.
- (b) A rate of 20% on the first €25,000 and 40% on the balance
- (c) A rate of 25% on the first €32,800 and 47% on the balance

In each case, assume total tax credits of €3,300.

4. Find the effective rate of taxation on earnings of (a) €25,000, (b) €50,000 and (c) €100,000 if income tax is applied at the rate of 20% on the first €32,800 of earnings and 41% on the balance. Assume total tax credits in each case of €2,450.
5. Repeat Question 4 with increased tax rates of 22% on the first €30,000 and 45% on the balance.