

## Year 10 Homework – Ratio etc

- 1) (a) A plank of wood 240cm long weighs 3.9kg.
    - (i) How much would a plank of the same wood 320cm long weigh?
    - (ii) How long would a piece of wood be which weighed 6.5kg?
  - (b) My car travels 64km on 5 litres of petrol.
    - (i) How far would it travel on 7 litres?
    - (ii) How many litres would it use on a journey of 160km?
  - (c) A concrete mixture contains gravel and sand in the ratio 3:5. What mass of gravel is there is a 40kg sack of the mixture?
- 2) A team of 12 painters can paint the Humber Bridge in 20 days.
    - (a) How long would it take 1 painter?
    - (b) How long would it take 16 painters?
    - (c) If the job is to be completed in 8 days, how many painters are required?
  - 3) My map of Oxfordshire has a scale of 1:25000.
    - (i) If the distance from Islip to Beckley is 18cm on the map, what is the actual distance in km?
    - (ii) If the distance from Eynsham to Woodstock is 7.5 km, how far will the distance be on the map?
    - (iii) The map measures 40cm by 80cm. What area of ground does the map cover?
  - 4) The rate of exchange between sterling and euros is 1 euro to £0.67.
    - (a) How many Euros could I get in exchange for £75 ?
    - (b) How many pounds could I get in exchange for 80 Euros?(Give answers to the nearest penny or cent.)

## Year 10 Homework – Ratio etc

- 1) (a) A plank of wood 240cm long weighs 3.9kg.
    - (i) How much would a plank of the same wood 320cm long weigh?
    - (ii) How long would a piece of wood be which weighed 6.5kg?
  - (b) My car travels 64km on 5 litres of petrol.
    - (i) How far would it travel on 7 litres?
    - (ii) How many litres would it use on a journey of 160km?
  - (c) A concrete mixture contains gravel and sand in the ratio 3:5. What mass of gravel is there is a 40kg sack of the mixture?
- 2) A team of 12 painters can paint the Humber Bridge in 20 days.
    - (a) How long would it take 1 painter?
    - (b) How long would it take 16 painters?
    - (c) If the job is to be completed in 8 days, how many painters are required?
  - 3) My map of Oxfordshire has a scale of 1:25000.
    - (i) If the distance from Islip to Beckley is 18cm on the map, what is the actual distance in km?
    - (ii) If the distance from Eynsham to Woodstock is 7.5 km, how far will the distance be on the map?
    - (iii) The map measures 40cm by 80cm. What area of ground does the map cover?
  - 4) The rate of exchange between sterling and euros is 1 euro to £0.67.
    - (a) How many Euros could I get in exchange for £75 ?
    - (b) How many pounds could I get in exchange for 80 Euros?(Give answers to the nearest penny or cent.)