

Workout

Question 1:

- (a) LB: 3.5g, UB: 4.5g
- (b) LB: 11.5cm, UB: 12.5cm
- (c) LB: 74.5miles, UB: 75.5miles
- (d) LB: 45kg, UB: 55kg
- (e) LB: 125 seconds, UB: 135 seconds
- (f) LB: 222.5km, UB: 227.5km
- (g) LB: 350ml, UB: 450ml
- (h) LB: 1895 hours, UB: 1905 hours
- (i) LB: 2650mm, UB: 2750mm
- (j) LB: 4950km, UB: 5050km
- (k) LB: 27995kg, UB: 28005kg
- (l) LB: 25000km/h, UB: 35000km/h

Question 2:

- (a) LB: 75, UB: 84
- (b) LB: £9.50, UB: £10.49
- (c) LB: 450 chairs, UB: 549
- (d) LB: 13500, UB: 14499
- (e) LB: £28950, UB: £29050

Question 3:

- (a) LB: 3.75cm, UB: 3.85cm
- (b) LB: 15.15, UB: 15.25
- (c) LB: 6.35g, UB: 6.45g
- (d) LB: 515.85kg, UB: 515.95kg
- (e) LB: 0.065 seconds, UB: 0.075 seconds
- (f) LB: 5.255mm, UB: 5.265mm
- (g) LB: 24.0905kg, UB: 24.0915kg
- (h) LB: 7.95cm, UB: 8.05cm

Question 4:

- (a) LB: 3.5 miles, UB: 4.5 miles
- (b) LB: 25cm, UB: 35cm
- (c) LB: 850ml, UB: 950ml
- (d) LB: 0.15m, UB: 0.25m
- (e) LB: 13.5 hours, UB: 14.5 hours
- (f) LB: 275g, UB: 285g
- (g) LB: 41500km, UB: 42500km
- (h) LB: 747.5 gallons, UB: 748.5 gallons
- (i) LB: 395m, UB: 405m
- (j) LB: 7950kg, UB: 8050kg
- (k) LB: 289950km/h, UB: 290050km/h
- (l) LB: 0.0235, UB: 0.0245
- (m) LB: 15.05, UB: 15.15km
- (n) LB: 95g, UB: 150g

Apply:

Question 1: No yet! As the space may be as little as 205cm, he really needs to go back and measure again... a bit more accurately!

Question 2: 349

Question 3: No, to the nearest 10, the LB would be 395m and UB 405m

Question 4: (a) £2.94 (b) £3.68

Question 5: I agree with the 12%... 9.5 and 15.

Option 1 – 5 is already to 1 significant figure

Option 2 – 10.5 isn't the upper bound, 11 rounds to 10 to 1st, so do 14 etc.

Option 3 – I agree!

Option 4 – 7.5 rounds to 8 to 1 sf.