Long Division 4

Q1. a)2,500/18...estimate..1800=18x100, 180= 10x18 estimate= 130 lots

So either use multiples or factors to help...I will divide by 2, then by 9 (as 9x2=18) 2500/2= 1250, then 1250/9= 1, carry 3, 3 carry 8, 8 rem 8= 138 rem8= 138and 8/9(16/18-as we were dividing by18)

b)5,000/18...use answer from a)...double it....why?= 276 and 32/18(1 and 14/18)= 277 and 14/18

c)7,500/18...use answers from a) and b)...add them...why?= 277+138=415 remainders...16 +14=30. =416 and 12/18

d)7,500/36...think about answer in c) will it be double or half? Why?= half answer as lots are 2x bigger... 208 and 6/18 or 12/36 (as this is half of 12/18)

Q2. Predict remainders...

Using multiples 990 (90x11)...use to work out reminder 10, then 0

(12x8=96)so 12x80=960, 12x83=996...remainder 4, then 5

13x7=91, 13x70=910, so 13x77=1001....so 1000 has a rem of 12

Q3. So 250/32....estimate 320=10, 160=5...estimate 8

32,64,96,128,160,192,224,256... 7 magazines, 26 pages left

500/32....(double last answer) 14 magazines, 52 pages left so 15 magazines, 20 pages left

1000/32.. (double last one)= 30+40pages= 31+8pages

2500/32..(double last one +the 500)= 62+16pages+15+20pages=77+36pages=78magazines 4pages spare

Q4. 8200 lorries

79 per trip..... 8200/79. Estimate 7900=100 trips, estimate 104

79, 158, 237, 316

So 104 trips (7900+4 more lots to get them all across) as 7900+300=8200

Q5. 99 x star plus 89 = 9890

So subtract the 89 to leave 99 x star = 9801

9801/99= (we know 98x100=9800), so 98x99=9702, 99x99=9801

So star = 99