

SOLUTION TO S.I SET1
MATHS HOME WORK.

1) 321_{five} $1+4 = 5 \div 5 = 1$
 $r=0$
 $+ 434_{\text{five}}$ $1+2+3 = 6 \div 5$
 $= 1r1$
 1310_{five} $1+3+4 = 8 \div 5$
 $= 1r3$

2) 523_{seven} $(3+7)-4=6$
 $- 354_{\text{seven}}$ $(4+7)-5=3$
 136_{seven}

3) $3t2_{\text{eight}}$ $2 \times 3 = 6$
 $t \times 3 = 30$
 $\times 3_{\text{eight}}$ $30 \div 8 =$
 $3r6$
 1466_{eight}
 $3 + (3 \times 3)$
 $12 \div 8$
 $= 1r4$

4) $421_{\text{five}} \div 3_{\text{five}}$
 $421_{\text{five}} \equiv (4 \times 5^2) + (2 \times 5^1)$
 $+ (1 \times 5^0)$
 $\equiv (4 \times 25) + (10) + 1$

$\equiv 100 + 10 + 1 = 111_{\text{ten}}$

$3_{\text{five}} \equiv 3_{\text{ten}}$

$\therefore 421_{\text{five}} \div 3_{\text{five}} \equiv 111 \div 3 = 37$

alternatively $3 \overline{) 111}$
 09
 21
 21

37_{ten} to base five.

Base	Number	Remainder
5	37	2
5	7	2
5	1	1
	0	

$= 122_{\text{five}}$

5) (a) 165431 is a number in base ten.

(b) Place value of 4 is hundreds

(c) Value of digit 5 is 5000 (five thousand)

Teacher.
- ENB - Samuel Kirabo