

REVISION: NUMBER BASES

Fill in the correct answer in the space provided.

1. Complete the number sequence in descending order.

242_5 , 5 , 5 , 5

2. Change 149_{10} to base 5.

Answer: 5

3. $111011_2 + 10101_2 =$ 2

4. $1540_6 + 42_6 =$ 6

5. $8735_9 + 2806_9 =$ 9

6. $2102_3 - 1101_3 =$ 3

7. $3110_4 - 322_4 =$ 4

8. $613_7 - 125_7 =$ 7

9. Express 23_{10} as a number in base 2. Answer: 2

10. What is the value of 3 in base ten, of 3144_5 ? Answer:

11. Express $6^2 + 7^2$ as a number in base eight. Answer: 8

12. Express 111000101_2 as a number in base 8. Answer: 8

13. Given $11000_2 + k_2 = 101010_2$, what is the value of k? Answer: k = 2

14. Given that $2 \times 5^3 + 5^2 + 3(5) = k_5$, find the value of k. Answer: k = 5

15. Express 133_5 as a number in base 2. Answer: 2

16. Given $10111_2 < k < 11001_2$. Find the value of k as a number in base 8. Answer: k =