Order of Magnitude

State how many order of magnitude difference for each value below.

Example: 1.5×10^5 and 2.5×10^2 has a magnitude difference of 3

1. 1.5×10^{14} and 3.3×10^{22} Difference=_____

2. 4.6×10^{19} and 5.4×10^{25} Difference=_____

3. 8.1×10^3 and 6.3×10^9 Difference=_____

4. 9.7×10^5 and 2.8×10^{24} Difference=_____

5. 4.3×10^8 and 4.5×10^{19} Difference=_____

6. 5.6×10^2 and 3.5×10^2 Difference=_____

7. 1.1×10^{-8} and 7.8×10^2 Difference=_____

8. 9.9×10^{-17} and 9.0×10^{12} Difference=_____

9. 3.7×10^{-9} and 3.7×10^{-1} Difference=_____

10. 7.7×10^{-13} and 1.9×10^6 Difference=_____

11. 2.1×10^{-8} and 2.2×10^7 Difference=_____

12. 4.2×10^0 and 8.4×10^8 Difference=_____

13. 8.7×10^{-7} and 8.0×10^0 Difference=_____

14. 6.5×10^{-2} and 7.5×10^2 Difference=_____

15. 8.0×10^{-6} and 4.0×10^8 Difference=_____

Round the following numbers to the place stated:

16. Round to the nearest 10: 35

17. Round to the nearest 10: 43

18. Round to the nearest 100: 10067

19. Round to the nearest 10th: 33.2

23. Round to the nearest 100th: 489.999951

20. Round to the nearest 1000th: 345.6789

21. Round to the nearest 100th: 45.996

22. Round to the nearest 100th: 46.001

Round the following numbers to 4 significant figure:

24. 45674

25. 54321

26. 1.3822

27. 0.0045665

28. 0.0537652

<u>29.</u> 9.89952

Round the following numbers to the correct number of digets.

Number	5 digits	4 digits	3 digits	2 digits
30. 5.13159	_____	_____	_____	_____
31. 8.59350	_____	_____	_____	_____
32. 7.15893	_____	_____	_____	_____
33. 9.98998	_____	_____	_____	_____