UPPER AND LOWER BOUNDS

Task 1 – Work out the lower and upper bounds of each of the following numbers.

1) A number is 240, correct to the nearest 10.

2) A number is 670, correct to the nearest 100.

3) A number is 95, correct to the nearest 5.

4) A number is 12000, correct to the nearest 1000.

5) A number is 480, correct to the nearest 10.

6) A number is 135, correct to the nearest 5.

7) A number is 2100, correct to the nearest 100.

8) A number is 45000, correct to the nearest 1000.

9) A number is 125, correct to the nearest 10.

10) A number is 65, correct to the nearest 5.

Task 2 – Work out the lower and upper bounds of each of the following numbers.

11) A number is 8.92, correct to 2 decimal places.

12) A number is 2.748, correct to 3 decimal places.

13) A number is 0.3, correct to 1 decimal place.

14) A number is 7.40, correct to 2 decimal places.

15) A number is 11, correct to the nearest unit.

16) A number is 5.0, correct to 1 decimal place.

17) A number is 3.67, correct to 2 decimal places.

18) A number is 9.301, correct to 3 decimal places.

19) A number is 15, correct to the nearest unit.

20) A number is 4.7, correct to 1 decimal place.

Task 3 – Work out the lower and upper bounds of each of the following numbers.

21) A number is 700, correct to 1 significant figure.

22) A number is 4300, correct to 2 significant figures.

23) A number is 0.008, correct to 1 significant figure.

24) A number is 62, correct to 2 significant figures.

25) A number is 9.4, correct to 2 significant figures.

26) A number is 0.73, correct to 2 significant figures.

27) A number is 12000, correct to 3 significant figures.

28) A number is 4.06, correct to 3 significant figures.

Task 4

29) The weight of a dog is 36 kg, correct to the nearest kg. Work out the lower bound of the dog's weight.

30) The volume of a tank is 4200 litres, correct to the nearest 100 litres. Work out the lower bound of the volume.

31) A plank is 320 cm long, correct to the nearest 10 cm. Work out the upper bound of the length.

32) A train journey time is 140 minutes, correct to the nearest 5 minutes. Work out the lower bound of the time.

33) The cost of a phone is £560, correct to the nearest £10. Work out the lower bound of the cost.

34) The speed of a van is 95 km/h, correct to the nearest 5 km/h. Work out the difference between the upper and lower bound of the speed. Then, state one observation.

35) A person's height is given as 1.7 metres when rounded. The lower bound of their height is 1.65 m. To which place value was the height rounded?