

Name & Surname: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Class: \_\_\_\_\_\_\_

 Grade 6 & 7 2025 # 25 Hand in by Thurs 28 Aug

In a paddock of sheep, there are 4 times as many male sheep as female sheep. In

another paddock, there are 5 times as many females as males. When the two flocks

of sheep are combined, there are equal numbers of males and females. What is the

smallest possible total number of sheep?

|  |  |
| --- | --- |
| Paddock 1 | Paddock 2 |
| Male | Female | Male | Female |
| 4 | 1 | 1 | 5 |
| 8 | 2 | 2 | 10 |
| 12 | 3 | 3 | 15 |
| 16 | 4 | 4 | 20 |
| 20 | 5 | 5 | 25 |
| 24 | 6 | 6 | 30 |

Therefore, 38 sheep

Could look at it in terms of the differences between male and female in each paddock.

The differences in paddock 1 (in favour of the males) are 3, 6, 9, 12, 15,…

The differences in paddock 2 (in favour of the females) are 4, 8, 12, 16, 20,…

When the differences are the same in both paddocks there will be the same totals of male and female