

## Changing Ratios

- (1) The ratio of girls to boys at a party was 27:31. After 9 boys arrived, the ratio of girls to boys at the party was 27:32. Find the number of boys at the start.
- (2) The ratio of girls to boys at a party was 7:10. After 4 boys arrived, the ratio of girls to boys at the party was 21:32. Find the number of boys at the end.
- (3) The ratio of girls to boys at a party was 37:31. After 12 girls arrived, the ratio of girls to boys at the party was 115:93. Find the number of girls at the start.
- (4) The ratio of girls to boys at a party was 13:12. After 3 girls left, the ratio of girls to boys at the party was 1:1. Find the number of girls at the end.
- (5) The ratio of girls to boys at a party was 1:2. After 11 girls arrived and 11 boys left, the ratio of girls to boys at the party was 37:63. Find the number of boys at the start.
- (6) The ratio of girls to boys at a party was 45:19. After 9 girls left and 9 boys arrived, the ratio of girls to boys at the party was 153:71. Find the number of children at the end.
- (7) The ratio of girls to boys at a party was 3:4. After 5 girls arrived and 5 boys left, the ratio of girls to boys at the party was 19:23. Find the number of children at the end.
- (8) The ratio of girls to boys at a party was 1:2. After 6 girls left and 6 boys arrived, the ratio of girls to boys at the party was 17:43. Find the number of children at the end.
- (9) The ratio of girls to boys at a party was 38:33. After 12 girls left, the ratio of girls to boys at the party was 35:33. Find the number of boys at the start.
- (10) The ratio of girls to boys at a party was 11:5. After 12 girls arrived, the ratio of girls to boys at the party was 14:5. Find the number of children at the start.
- (11) The ratio of girls to boys at a party was 18:41. After 5 girls arrived, the ratio of girls to boys at the party was 1:2. Find the number of girls at the start.
- (12) The ratio of girls to boys at a party was 19:18. After 4 girls arrived, the ratio of girls to boys at the party was 173:162. Find the number of girls at the end.
- (13) The ratio of girls to boys at a party was 8:23. After 6 boys arrived, the ratio of girls to boys at the party was 16:47. Find the number of children at the start.
- (14) The ratio of girls to boys at a party was 16:23. After 8 girls arrived and 8 boys left, the ratio of girls to boys at the party was 4:5. Find the number of boys at the end.
- (15) The ratio of girls to boys at a party was 47:15. After 2 girls arrived, the ratio of girls to boys at the party was 85:27. Find the number of boys at the start.
- (16) The ratio of girls to boys at a party was 15:14. After 9 girls arrived and 9 boys left, the ratio of girls to boys at the party was 63:53. Find the number of girls at the end.

- (17) The ratio of girls to boys at a party was 22:13. After 1 girls left and 1 boys arrived, the ratio of girls to boys at the party was 79:47. Find the number of boys at the end.
- (18) The ratio of girls to boys at a party was 23:18. After 6 girls arrived, the ratio of girls to boys at the party was 82:63. Find the number of girls at the start.
- (19) The ratio of girls to boys at a party was 31:35. After 11 girls arrived, the ratio of girls to boys at the party was 27:28. Find the number of girls at the start.
- (20) The ratio of girls to boys at a party was 48:41. After 7 boys left, the ratio of girls to boys at the party was 6:5. Find the number of boys at the start.
- (21) The ratio of girls to boys at a party was 31:29. After 12 girls left and 12 boys arrived, the ratio of girls to boys at the party was 29:31. Find the number of boys at the start.
- (22) The ratio of girls to boys at a party was 33:40. After 4 boys left, the ratio of girls to boys at the party was 77:92. Find the number of girls at the end.