

Name: \_\_\_\_\_

Due Date: \_\_\_\_\_

Teacher: \_\_\_\_\_

Parent Sign: \_\_\_\_\_

---

1. Write the ratio of 8 apples to 5 oranges using colon notation.
2. Write the ratio of 12 cats to 4 dogs in simplest form.
3. If a recipe uses 3 cups of flour for every 2 cups of sugar, write the ratio flour : sugar.
4. Simplify the ratio 18 : 24.
5. Are the ratios 4 : 9 and 8 : 18 equivalent? Explain (yes/no).
6. Find the missing number:  $7 : x = 21 : 63$ .
7. Write the ratio 5 to 20 as part:whole (part:total) and simplify.
8. A box has 15 red pencils and 10 blue pencils. What is the ratio red : blue? Simplify it.
9. If the ratio of cats to total animals in a shelter is 3 : 10 and there are 30 cats, how many animals are in the shelter?
10. Convert the ratio 2 : 5 to a fraction (part of whole).
11. Find the missing number:  $4 : 7 = 12 : x$ .
12. A class has 14 boys and 11 girls. What is the ratio boys : girls? Also write the ratio girls : total students.
13. Write an equivalent ratio to 6 : 8 by multiplying both terms by 3.
14. If 9 red balls and 27 green balls are in a bag, what is the ratio red : green in simplest form?
15. Which is greater: 3 : 4 or 4 : 5? (Compare without decimals.)
16. A map uses a scale ratio 1 : 100,000 (1 cm on the map equals 100,000 cm in real life). If two towns are 3 cm apart on the map, what is the real distance in centimeters? (No need to convert units.)
17. Find the missing value:  $x : 10 = 9 : 30$ .
18. A juice mix calls for 2 parts concentrate to 5 parts water. If you use 10 cups of water, how many cups of concentrate do you need?
19. Express the ratio 45 : 60 in simplest form.
20. A club has a ratio of 2 teachers to every 15 students. If there are 90 students, how many teachers are there?
21. Write the ratio of 0 red marbles to 7 blue marbles.
22. If the ratio of green : yellow = 5 : 8 and there are 40 yellow pieces, how many green pieces are there?
23. Simplify the ratio 100 : 250.
24. A basket contains 8 apples, 6 oranges, and 6 bananas. What is the ratio apples : total fruit?
25. Which is equivalent to 3 : 10: 6 : 20, 9 : 30, both, or neither?
26. Find the missing number:  $16 : x = 4 : 1$ .
27. A school band has 21 wind instruments and 14 percussion instruments. What is the ratio wind : percussion in simplest form?
28. Convert the ratio 7 : 14 to a decimal showing the part per whole (7 out of 14).
29. If red : blue = 3 : 2 and there are 18 red marbles, how many blue marbles are there?
30. A bag has 24 black socks and 8 white socks. What is the ratio white : total?



Name: \_\_\_\_\_

Due Date: \_\_\_\_\_

Teacher: \_\_\_\_\_

Parent Sign: \_\_\_\_\_

---

31. Simplify  $27 : 36$ .
32. A team won 8 games and lost 4 games. What is the ratio wins : losses? Also write wins : total games.
33. Find the missing value:  $5 : 9 = x : 81$ .
34. A bakery uses 4 cups of sugar for every 6 cups of flour. If they use 24 cups of flour, how many cups of sugar do they use?
35. Write the ratio of 1 minute to 3 seconds (expressed as minutes : seconds).
36. A library has 120 fiction books and 80 nonfiction books. What is the ratio fiction : nonfiction in simplest form?
37. If the part:whole ratio of girls : total in a class is  $3 : 5$  and there are 12 girls, how many students are in the class?
38. Which is larger:  $7 : 12$  or  $14 : 25$ ? (Compare by converting to fractions or cross-multiplying.)
39. Find the missing number:  $9 : 20 = 27 : x$ .
40. A fruit salad has strawberries and blueberries in the ratio  $5 : 3$ . If there are 40 strawberries, how many blueberries?
41. Simplify the ratio  $64 : 48$ .
42. A survey shows 30 students prefer cats and 45 prefer dogs. What is the ratio cats : total students?
43. If the ratio of adults to children at a fair is  $2 : 7$  and there are 28 children, how many adults are there?
44. Write the ratio  $14 : 21$  in simplest form and as a fraction part of the total for the first number (14 out of total 35).
45. Find the missing number:  $x : 6 = 10 : 15$ .
46. A classroom has 5 rows with 6 desks in each row. If 20 desks are occupied by boys and the rest by girls, what is the ratio boys : girls?
47. Convert  $3 : 4$  to a percentage (as part of the whole).
48. A pack contains 18 red cards, 12 blue cards, and 6 green cards. What is the ratio green : total?
49. If the ratio of peanut butter to jelly in a sandwich is  $2 : 3$  and you make 25 sandwiches using that ratio (whole sandwiches only), how many parts of peanut butter are needed? (Just give total parts of peanut butter.)
50. A painting mix uses a ratio of 1 part blue to 9 parts white. If you want 100 parts total, how many parts should be blue and how many white?