## Add, subtract and simplification of fraction

Simplify the following fractions.

1. 
$$\frac{3}{8} + \frac{1}{4} - \frac{5}{12} =$$

$$2. \ 2^{1}/_{6} + 3^{1}/_{5} =$$

3. 
$$5^{3}/_{8} - 2^{1}/_{3} =$$

4. 
$$4^{3}/_{5} + 3^{5}/_{6} - 7/_{30} =$$

Simplify the following fractions

$$5.^{8}/_{9} \times ^{6}/_{24} \div ^{10}/_{18} =$$

6. 
$$4^{2}/_{3} \times 3^{3}/_{4} \div {}^{12}/_{15} =$$

7. 
$$5^{1}/_{2} \div {}^{9}/_{16} \times 5^{2}/_{3} =$$

8. 
$$(2^{1}/_{3} \div 2^{3}/_{4}) \div 4^{5}/_{6} =$$

9. Which sign makes the sentence true?

$$\frac{6}{9}$$
  $\frac{1}{3}$  +  $\frac{5}{9}$ 

10. Estimate the difference. Round each number to the nearest whole number, then subtract.

$$8\frac{5}{7}-1\frac{8}{9}$$

11. Which sign makes the sentence true?

$$\frac{1}{2}$$
 0.5

12. Add and simplify your answer and write it as a proper fraction or as a whole or mixed number.

$$\frac{-3}{10} + \frac{-2}{5} = \dots$$

13. Estimate the product. Round the first factor to the nearest whole number, then multiply.

$$5\frac{1}{10} \times 12$$

- 14. Sarah calculates that she spends 1/3 of her pocket money on sweets, and 2/5 on magazines. What fraction of her pocket money does Sarah spend on sweets and magazines?
- 15. Sam has <sup>3</sup>/<sub>4</sub> kg of toffees. If he gives <sup>3</sup>/<sub>8</sub> kg to Mike, how many will he have left?
- 16. Of the pies that Preston's Pie Shop sold last month, <sup>1</sup>/<sub>3</sub> were blueberry pies and 1/3 were blackberry pies. What fraction of the pies sold were either blueberry or blackberry?
- 17. Madison's milkshake recipe calls for 4  $^4$ / $_5$  scoops of ice cream and Drake's recipe calls for 3 1/5 scoops. How many more scoops of ice cream are used in Madison's recipe than in Drake's recipe?
- 18. Scarlett collected 5/8 of a bin of glass bottles to recycle. Kailey collected 2 times as many bins as Scarlett. How many bins of bottles did Kailey collect?
- 19. In Yu Jie's grade, 2/5 of the students have a sister. Of the students who have a sister, 1/3 also have a brother. What fraction of the students in Yu Jie's grade have both a sister and a brother?
- 20. What is the reciprocal of  $^2/_3$  and 1?
- 21. A factory uses  $^{1}/_{8}$  of a barrel of raisins in each batch of granola bars. Yesterday, the factory used  $^{3}/_{4}$  of a barrel of raisins. How many batches of granola bars did the factory make yesterday?
- 22. Over the weekend, Hugo drank 3/4 of a litre of soda and Charlotte drank 1/6 of a litre. How much more soda did Hugo drink than Charlotte?

Write the missing numbers in these fraction sums.

$$\frac{1}{4} + \frac{1}{8} = 1 \qquad \frac{1}{3} + \frac{8}{3} = 1$$