

## Simplifications of fractions

In case of division, change  $\div$  into  $\times$  sign, then switch around (up side down) the right fraction , and cross cancel to simplify.

Example:  $\frac{2}{3} \div \frac{4}{5} = \frac{2}{3} \times \frac{5}{4} = \frac{2 \times 5}{3 \times 4} = \frac{1 \times 5}{3 \times 2} = \frac{5}{6}$

1.  $\frac{1}{8} \div \frac{1}{4} =$  \_\_\_\_\_

2.  $\frac{3}{8} \div \frac{9}{4} =$  \_\_\_\_\_

3.  $\frac{2}{5} \div \frac{4}{5} =$  \_\_\_\_\_

4.  $\frac{15}{7} \div \frac{5}{14} =$  \_\_\_\_\_

5.  $\frac{21}{16} \div \frac{7}{24} =$  \_\_\_\_\_

6.  $\frac{10}{12} \div \frac{5}{18} =$  \_\_\_\_\_

7.  $\frac{5}{8} \div \frac{3}{4} =$  \_\_\_\_\_

8.  $\frac{120}{100} \div \frac{90}{160} =$  \_\_\_\_\_

9.  $\frac{25}{30} \div \frac{5}{250} =$  \_\_\_\_\_

10.  $\frac{8}{20} \div \frac{200}{410} =$  \_\_\_\_\_

11.  $\frac{600}{800} \div \frac{36}{48} =$  \_\_\_\_\_

12.  $\frac{3}{5} \div \frac{4}{5} \times \frac{8}{15} =$  \_\_\_\_\_

13.  $\frac{4}{5} \div \frac{2}{10} \times \frac{2}{3} =$  \_\_\_\_\_

14.  $\frac{8}{15} \div \frac{25}{16} \times \frac{12}{9} =$  \_\_\_\_\_

$$15. \frac{4}{5} \div \frac{18}{10} \times \frac{9}{12} = \underline{\hspace{2cm}}$$

$$16. (\frac{1}{2} \div \frac{2}{6}) \times \frac{2}{3} = \underline{\hspace{2cm}}$$

$$17. (\frac{1}{9} \div \frac{1}{3}) \div \frac{2}{3} = \underline{\hspace{2cm}}$$

$$18. 3\frac{1}{5} \div \frac{4}{5} = \underline{\hspace{2cm}}$$

$$19. 3\frac{3}{4} \div 3\frac{1}{8} = \underline{\hspace{2cm}}$$

$$20. 4\frac{1}{5} \div 2\frac{1}{3} = \underline{\hspace{2cm}}$$

$$21. 4\frac{1}{6} \div 2\frac{1}{7} = \underline{\hspace{2cm}}$$

$$22. 5\frac{1}{5} \div 4\frac{1}{3} = \underline{\hspace{2cm}}$$

A length of 1 meter rope is given, split it into different parts.

How many:  $\frac{1}{10}$ 's make a half meter rope?

It means  $\frac{1}{2} \div \frac{1}{10} = \frac{1}{2} \times \frac{10}{1} = \frac{10}{2} = 5$  (ans)

23. Halves make a 1 meter rope? 

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24. Quarters make a 1 meter rope? 

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25. Quarters make a half meter rope? 

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26.  $\frac{1}{6}$ 's make a half meter rope? 

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27.  $\frac{1}{8}$ 's make a half meter rope? 

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28.  $\frac{1}{12}$ 's make a half meter rope? \_\_\_\_\_
29.  $\frac{1}{9}$ 's make a  $\frac{1}{3}$  meter rope? \_\_\_\_\_
30.  $\frac{1}{12}$ 's make a  $\frac{1}{4}$  meter rope? \_\_\_\_\_
31.  $\frac{1}{12}$ 's make a  $\frac{1}{3}$  meter rope? \_\_\_\_\_
32.  $\frac{1}{12}$ 's make a  $\frac{2}{3}$  meter rope? \_\_\_\_\_
33.  $\frac{1}{6}$ 's make a  $\frac{2}{3}$  meter rope? \_\_\_\_\_
34.  $\frac{1}{6}$ 's make a  $\frac{1}{3}$  meter rope? \_\_\_\_\_
35.  $\frac{1}{12}$ 's make a  $\frac{3}{4}$  meter rope? \_\_\_\_\_
36.  $\frac{1}{12}$ 's make a  $\frac{1}{6}$  meter rope? \_\_\_\_\_
37.  $\frac{1}{27}$ 's make a  $\frac{1}{9}$  meter rope? \_\_\_\_\_
38.  $\frac{1}{32}$ 's make a  $\frac{1}{4}$  meter rope? \_\_\_\_\_
39.  $\frac{1}{24}$ 's make a  $\frac{3}{4}$  meter rope? \_\_\_\_\_
40.  $\frac{1}{15}$ 's make a  $\frac{3}{5}$  meter rope? \_\_\_\_\_
41.  $\frac{1}{10}$ 's make a  $\frac{2}{5}$  meter rope? \_\_\_\_\_
42.  $\frac{1}{12}$ 's make a  $\frac{5}{6}$  meter rope? \_\_\_\_\_