

Esercizi sulla semplificazione di una frazione

1. Ridurre ai minimi termini le seguenti frazioni utilizzando M.C.D.:

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|-----|-------------------|------------------------------|-----|---------------------|------------------------------|
| 1. | $\frac{12}{36}$ | | 13. | $\frac{192}{216}$ | |
| | | $\left[\frac{1}{3}\right]$ | | | $\left[\frac{8}{9}\right]$ |
| 2. | $\frac{15}{35}$ | | 14. | $\frac{40}{100}$ | |
| | | $\left[\frac{3}{7}\right]$ | | | $\left[\frac{2}{5}\right]$ |
| 3. | $\frac{20}{50}$ | | 15. | $\frac{96}{144}$ | |
| | | $\left[\frac{2}{5}\right]$ | | | $\left[\frac{2}{3}\right]$ |
| 4. | $\frac{75}{165}$ | | 16. | $\frac{165}{195}$ | |
| | | $\left[\frac{5}{11}\right]$ | | | $\left[\frac{11}{13}\right]$ |
| 5. | $\frac{49}{343}$ | | 17. | $\frac{96}{144}$ | |
| | | $\left[\frac{1}{7}\right]$ | | | $\left[\frac{2}{3}\right]$ |
| 6. | $\frac{48}{60}$ | | 18. | $\frac{360}{504}$ | |
| | | $\left[\frac{4}{5}\right]$ | | | $\left[\frac{5}{7}\right]$ |
| 7. | $\frac{12}{84}$ | | 19. | $\frac{990}{630}$ | |
| | | $\left[\frac{1}{7}\right]$ | | | $\left[\frac{11}{7}\right]$ |
| 8. | $\frac{63}{420}$ | | 20. | $\frac{2310}{525}$ | |
| | | $\left[\frac{3}{20}\right]$ | | | $\left[\frac{22}{5}\right]$ |
| 9. | $\frac{135}{720}$ | | 21. | $\frac{650}{950}$ | |
| | | $\left[\frac{3}{16}\right]$ | | | $\left[\frac{13}{19}\right]$ |
| 10. | $\frac{162}{171}$ | | 22. | $\frac{540}{2880}$ | |
| | | $\left[\frac{18}{19}\right]$ | | | $\left[\frac{3}{16}\right]$ |
| 11. | $\frac{225}{72}$ | | 23. | $\frac{2205}{6125}$ | |
| | | $\left[\frac{25}{8}\right]$ | | | $\left[\frac{9}{25}\right]$ |
| 12. | $\frac{504}{294}$ | | 24. | $\frac{9072}{3213}$ | |
| | | $\left[\frac{12}{7}\right]$ | | | $\left[\frac{48}{17}\right]$ |

2. Ridurre ai minimi termini le seguenti frazioni utilizzando il metodo delle divisioni successive:

1. $\frac{15}{25}$

$$\left[\frac{3}{5} \right]$$

2. $\frac{20}{45}$

$$\left[\frac{4}{9} \right]$$

3. $\frac{48}{96}$

$$\left[\frac{1}{2} \right]$$

4. $\frac{100}{40}$

$$\left[\frac{5}{2} \right]$$

5. $\frac{49}{14}$

$$\left[\frac{7}{2} \right]$$

6. $\frac{105}{205}$

$$\left[\frac{21}{41} \right]$$

7. $\frac{215}{325}$

$$\left[\frac{43}{65} \right]$$

8. $\frac{120}{280}$

$$\left[\frac{3}{7} \right]$$

9. $\frac{258}{219}$

$$\left[\frac{86}{73} \right]$$

10. $\frac{275}{250}$

$$\left[\frac{11}{10} \right]$$

11. $\frac{236}{240}$

$$\left[\frac{59}{60} \right]$$

12. $\frac{150}{750}$

$$\left[\frac{1}{5} \right]$$

13. $\frac{380}{665}$

$$\left[\frac{4}{7} \right]$$

14. $\frac{504}{693}$

$$\left[\frac{8}{11} \right]$$

15. $\frac{576}{240}$

$$\left[\frac{12}{5} \right]$$

16. $\frac{231}{88}$

$$\left[\frac{21}{8} \right]$$

17. $\frac{2046}{528}$

$$\left[\frac{31}{8} \right]$$

18. $\frac{35}{945}$

$$\left[\frac{1}{27} \right]$$

19. $\frac{462}{561}$

$$\left[\frac{14}{17} \right]$$

20. $\frac{924}{140}$

$$\left[\frac{33}{5} \right]$$

21. $\frac{833}{588}$

$$\left[\frac{17}{12} \right]$$

22. $\frac{968}{396}$

$$\left[\frac{22}{9} \right]$$

23. $\frac{2448}{288}$

$$\left[\frac{17}{2} \right]$$

24. $\frac{792}{891}$

$$\left[\frac{8}{9} \right]$$

3. Ridurre ai minimi termini le seguenti frazioni utilizzando entrambi i metodi (con M.C.D. e per divisioni successive), verificando la corrispondenza dei risultati:

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|-----|-------------------|------------------------------|-----|--------------------|--------------------------------|
| 1. | $\frac{18}{48}$ | | 13. | $\frac{280}{565}$ | |
| | | $\left[\frac{3}{8}\right]$ | | | $\left[\frac{56}{113}\right]$ |
| 2. | $\frac{25}{75}$ | | 14. | $\frac{404}{592}$ | |
| | | $\left[\frac{1}{3}\right]$ | | | $\left[\frac{101}{148}\right]$ |
| 3. | $\frac{99}{66}$ | | 15. | $\frac{276}{440}$ | |
| | | $\left[\frac{3}{2}\right]$ | | | $\left[\frac{69}{110}\right]$ |
| 4. | $\frac{200}{45}$ | | 16. | $\frac{230}{80}$ | |
| | | $\left[\frac{40}{9}\right]$ | | | $\left[\frac{23}{8}\right]$ |
| 5. | $\frac{27}{81}$ | | 17. | $\frac{2000}{550}$ | |
| | | $\left[\frac{1}{3}\right]$ | | | $\left[\frac{40}{11}\right]$ |
| 6. | $\frac{144}{296}$ | | 18. | $\frac{39}{377}$ | |
| | | $\left[\frac{18}{37}\right]$ | | | $\left[\frac{3}{29}\right]$ |
| 7. | $\frac{128}{236}$ | | 19. | $\frac{460}{276}$ | |
| | | $\left[\frac{32}{59}\right]$ | | | $\left[\frac{5}{3}\right]$ |
| 8. | $\frac{125}{285}$ | | 20. | $\frac{925}{225}$ | |
| | | $\left[\frac{25}{57}\right]$ | | | $\left[\frac{37}{9}\right]$ |
| 9. | $\frac{244}{248}$ | | 21. | $\frac{840}{952}$ | |
| | | $\left[\frac{61}{62}\right]$ | | | $\left[\frac{15}{17}\right]$ |
| 10. | $\frac{375}{350}$ | | 22. | $\frac{965}{395}$ | |
| | | $\left[\frac{15}{14}\right]$ | | | $\left[\frac{193}{79}\right]$ |
| 11. | $\frac{336}{340}$ | | 23. | $\frac{1256}{244}$ | |
| | | $\left[\frac{84}{85}\right]$ | | | $\left[\frac{314}{61}\right]$ |
| 12. | $\frac{140}{720}$ | | 24. | $\frac{750}{825}$ | |
| | | $\left[\frac{7}{36}\right]$ | | | $\left[\frac{10}{11}\right]$ |