Arbeitsblatt 15. November 2024: Kürzen und erweitern

Verwenden Sie keinen Taschenrechner

1. Kürze soweit als möglich (Mathebuch S. 205)

(a) $\frac{\cancel{16}^{2}}{\cancel{24}^{3}} = \frac{2}{3}$ (b) $\frac{\cancel{20}^{5}}{\cancel{32}^{8}} = \frac{5}{8}$ (c) $\frac{\cancel{16}}{\cancel{64}^{4}} = \frac{1}{4}$ (d) $\frac{\cancel{20}^{5}}{\cancel{24}^{6}} = \frac{5}{6}$ (e) $\frac{\cancel{18}^{9}}{\cancel{32}^{16}} = \frac{9}{16}$ (f) $\frac{\cancel{36}^{9}}{\cancel{64}^{16}} = \frac{9}{16}$

(g) $\frac{\cancel{32}}{\cancel{128}^{4}} = \frac{1}{4}$ (h) $\frac{\cancel{27}^{3}}{\cancel{90}^{10}} = \frac{3}{10}$ (i) $\frac{\cancel{72}}{\cancel{144}^{2}} = \frac{1}{2}$ (j) $\frac{\cancel{51}^{3}}{\cancel{85}^{5}} = \frac{3}{5}$

2. Erweitere mit 4 (Mathebuch S. 205)

(a) $\frac{6}{7} = \frac{6}{7} \cdot \frac{4}{4} = \frac{24}{28}$ (b) $\frac{3}{8} = \frac{3}{8} \cdot \frac{4}{4} = \frac{12}{32}$ (c) $\frac{7}{9} = \frac{7}{9} \cdot \frac{4}{4} = \frac{28}{36}$ (d) $\frac{1}{12} = \frac{1}{12} \cdot \frac{4}{4} = \frac{4}{48}$

(e) $\frac{7}{13} = \frac{7}{13} \cdot \frac{4}{4} = \frac{28}{52}$ (f) $\frac{6}{11} = \frac{6}{11} \cdot \frac{4}{4} = \frac{24}{44}$

3. Erweitere auf den angegebenen Nenner (Mathebuch S. 205)

(a) $\frac{2}{3} = \frac{\boxed{16}}{24}$ (b) $\frac{3}{4} = \frac{\boxed{24}}{32}$ (c) $\frac{4}{7} = \frac{\boxed{20}}{35}$ (d) $\frac{5}{6} = \frac{\boxed{30}}{36}$

(e) $\frac{7}{16} = \frac{\boxed{28}}{64}$ (f) $\frac{4}{15} = \frac{\boxed{24}}{90}$