



Math 6. Klasse
letztes Quartal
HA Dossier 3



Bruchrechnen

Lernziele

- Brüche addieren / subtrahieren / multiplizieren
- Resultate kürzen / gemischte Zahlen wenn möglich
- Gemischte Zahlen addieren / Subtrahieren

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Test: Mittwoch, 01. Juni

Kurztest Bruchrechnen Teil 1

Name : _____ Punkte : _____ / 21

Brüche addieren / subtrahieren

Jede Aufgabe gibt 3 Punkte.

Brüche wenn möglich kürzen / gemischte Zahlen.

Zeit: 10 Minuten.

$$\frac{4}{5} + \frac{3}{6} =$$

$$\frac{6}{8} + \frac{3}{6} =$$

$$\frac{8}{10} - \frac{2}{5} =$$

$$\frac{3}{12} + \frac{4}{10} =$$

$$\frac{11}{15} - \frac{3}{6} =$$

$$\frac{19}{20} + \frac{3}{4} =$$

$$\frac{6}{9} - \frac{3}{7} =$$

Kurztest Bruchrechnen Teil 2

Name : _____ Punkte : _____ / 21

Brüche multiplizieren

Jede Aufgabe gibt 3 Punkte.

Brüche wenn möglich kürzen / gemischte Zahlen.

Zeit: 10 Minuten.

$$\frac{4}{5} \times \frac{3}{6} =$$

$$\frac{6}{8} \times \frac{3}{6} =$$

$$\frac{8}{10} \times 9 =$$

$$\frac{3}{12} \times \frac{4}{10} =$$

$$\frac{11}{15} \times \frac{3}{6} =$$

$$6 \times \frac{3}{8} =$$

$$\frac{6}{9} \times \frac{3}{7} =$$

Kurztest Bruchrechnen Teil 3

Name : _____ Punkte : _____ / 21

Brüche addieren / subtrahieren mit gemischten Zahlen

Jede Aufgabe gibt 3 Punkte.

Brüche wenn möglich kürzen / gemischte Zahlen.

Zeit: 10 Minuten.

$$2\frac{1}{2} + 1\frac{1}{3} =$$

$$2\frac{6}{8} + \frac{3}{5} =$$

$$4\frac{1}{3} - 1\frac{2}{5} =$$

$$3\frac{7}{12} - 1\frac{5}{8} =$$

$$\frac{11}{15} + 4\frac{3}{5} =$$

$$6 - \frac{3}{8} =$$

$$2\frac{1}{7} + 5\frac{2}{3} =$$

Name _____

Date _____
(Answer ID # 0801923)

Brüche

Vervollständige. Schreibe deine Antwort so weit wie möglich vereinfacht als gemischte Zahl.

1. $\frac{2}{3} - \frac{1}{2} =$	2. $\frac{1}{8} + \frac{1}{4} =$	3. $\frac{5}{6} + \frac{1}{2} =$	4. $\frac{6}{9} - \frac{1}{2} =$
5. $\frac{1}{3} + \frac{3}{5} =$	6. $\frac{5}{7} - \frac{1}{2} =$	7. $\frac{4}{5} - \frac{1}{2} =$	8. $\frac{1}{2} + \frac{5}{7} =$
9. $\frac{3}{4} - \frac{6}{12} =$	10. $\frac{5}{8} + \frac{2}{4} =$	11. $\frac{1}{3} + \frac{1}{2} =$	12. $\frac{6}{7} - \frac{1}{2} =$
13. $\frac{5}{9} - \frac{1}{2} =$	14. $\frac{3}{6} + \frac{1}{2} =$	15. $\frac{2}{6} + \frac{1}{3} =$	16. $\frac{1}{2} + \frac{7}{10} =$
17. $\frac{3}{4} - \frac{3}{8} =$	18. $\frac{4}{9} - \frac{1}{3} =$	19. $\frac{3}{5} + \frac{1}{2} =$	20. $\frac{7}{8} + \frac{1}{2} =$
21. $\frac{1}{2} - \frac{2}{7} =$	22. $\frac{1}{2} + \frac{2}{4} =$	23. $\frac{2}{3} + \frac{1}{2} =$	24. $\frac{3}{4} - \frac{4}{12} =$
25. $\frac{7}{8} + \frac{2}{4} =$	26. $\frac{1}{6} + \frac{1}{12} =$	27. $\frac{2}{5} - \frac{1}{3} =$	28. $\frac{1}{2} - \frac{3}{7} =$
29. $\frac{1}{2} - \frac{1}{5} =$	30. $\frac{2}{3} - \frac{2}{5} =$	31. $\frac{3}{4} + \frac{5}{8} =$	32. $\frac{1}{2} + \frac{6}{7} =$
33. $\frac{7}{12} - \frac{1}{6} =$	34. $\frac{2}{3} - \frac{5}{9} =$	35. $\frac{4}{8} + \frac{1}{4} =$	36. $\frac{2}{3} + \frac{5}{9} =$
37. $\frac{7}{9} - \frac{2}{3} =$	38. $\frac{4}{5} + \frac{1}{2} =$	39. $\frac{6}{7} + \frac{1}{2} =$	40. $\frac{1}{2} - \frac{3}{8} =$

Name _____

Date _____
(Answer ID # 0798643)

Brüche

Vervollständige. Schreibe deine Antwort so weit wie möglich vereinfacht als gemischte Zahl.

1. $2\frac{8}{9} - \frac{2}{6} =$	2. $\frac{1}{3} - \frac{3}{12} =$	3. $4\frac{3}{7} + 1\frac{1}{2} =$	4. $6\frac{5}{8} + 4\frac{1}{4} =$
5. $4\frac{1}{6} - \frac{1}{3} =$	6. $\frac{4}{5} + 2\frac{8}{10} =$	7. $1\frac{1}{4} + 3\frac{1}{2} =$	8. $4\frac{2}{8} - \frac{1}{2} =$
9. $5\frac{4}{7} - 1\frac{1}{2} =$	10. $\frac{1}{2} - \frac{2}{8} =$	11. $2\frac{2}{4} + 4\frac{1}{2} =$	12. $3\frac{8}{9} + 5\frac{1}{3} =$
13. $1\frac{3}{6} + 3\frac{3}{4} =$	14. $2\frac{1}{3} - 1\frac{4}{9} =$	15. $5\frac{2}{5} + 2\frac{1}{2} =$	16. $4\frac{3}{6} - \frac{1}{2} =$
17. $\frac{1}{5} + 3\frac{2}{10} =$	18. $\frac{2}{7} + 3\frac{1}{2} =$	19. $1\frac{2}{3} - \frac{5}{9} =$	20. $5\frac{3}{4} - 5\frac{3}{8} =$
21. $4\frac{1}{8} - 2\frac{2}{4} =$	22. $3\frac{1}{2} + 4\frac{3}{4} =$	23. $2\frac{5}{9} + 1\frac{1}{6} =$	24. $1\frac{1}{3} - \frac{5}{6} =$
25. $\frac{5}{8} - \frac{1}{2} =$	26. $5\frac{4}{6} - 5\frac{2}{4} =$	27. $2\frac{3}{5} + 2\frac{9}{10} =$	28. $3\frac{2}{6} + 3\frac{1}{3} =$
29. $5\frac{7}{9} + 1\frac{1}{3} =$	30. $6\frac{5}{7} - 5\frac{1}{2} =$	31. $\frac{2}{3} - \frac{1}{2} =$	32. $4\frac{3}{5} + 1\frac{4}{10} =$
33. $1\frac{1}{3} + 3\frac{5}{9} =$	34. $2\frac{3}{7} + \frac{1}{2} =$	35. $5\frac{7}{9} - 4\frac{1}{3} =$	36. $4\frac{2}{4} - 1\frac{3}{6} =$
37. $6\frac{1}{2} + 6\frac{6}{9} =$	38. $\frac{9}{12} - \frac{4}{6} =$	39. $1\frac{1}{8} - \frac{1}{2} =$	40. $3\frac{6}{9} + 1\frac{2}{6} =$

Brüche multiplizieren

$$1. \quad 4 \frac{1}{5} \cdot \frac{1}{3}$$

$$2. \quad 7 \frac{5}{9} \cdot \frac{5}{6}$$

$$3. \quad 1 \frac{3}{2} \cdot \frac{3}{4}$$

$$4. \quad 2 \frac{5}{8} \cdot \frac{5}{7}$$

$$5. \quad 1 \frac{4}{2} \cdot \frac{4}{9}$$

$$6. \quad 1 \frac{3}{7} \cdot \frac{3}{6}$$

$$7. \quad 4 \frac{8}{8} \cdot \frac{8}{11}$$

$$8. \quad 1 \frac{12}{5} \cdot \frac{12}{13}$$

$$9. \quad 9 \frac{10}{16} \cdot \frac{10}{15}$$

Brüche mit ganzer Zahl multiplizieren

$$10. \quad 16 \cdot \frac{2}{3}$$

$$11. \quad 12 \cdot \frac{5}{14}$$

$$12. \quad 11 \cdot \frac{9}{10}$$

$$13. \quad 2 \cdot \frac{6}{7}$$

$$14. \quad 15 \cdot \frac{10}{15}$$

$$15. \quad 3 \cdot \frac{8}{13}$$

$$16. \quad 9 \cdot \frac{7}{17}$$

$$17. \quad 4 \cdot \frac{11}{19}$$

$$18. \quad 8 \cdot \frac{4}{8}$$

gemischte Zahlen multiplizieren

$$19. \quad 6 \frac{2}{4} \cdot \frac{16}{17}$$

$$20. \quad 10 \frac{6}{14} \cdot 8 \frac{2}{3}$$

$$21. \quad 1 \frac{4}{2} \cdot 2 \frac{4}{5}$$

$$22. \quad 9 \frac{1}{9} \cdot \frac{5}{6}$$

$$23. \quad 4 \frac{3}{4} \cdot 12 \frac{15}{18}$$

$$24. \quad 1 \frac{9}{7} \cdot 5 \frac{9}{17}$$

Answer Key 0801923

1. $\frac{2}{3} - \frac{1}{2} = \frac{1}{6}$	2. $\frac{1}{8} + \frac{1}{4} = \frac{3}{8}$	3. $\frac{5}{6} + \frac{1}{2} = 1\frac{1}{3}$	4. $\frac{6}{9} - \frac{1}{2} = \frac{1}{6}$
5. $\frac{1}{3} + \frac{3}{5} = \frac{14}{15}$	6. $\frac{5}{7} - \frac{1}{2} = \frac{3}{14}$	7. $\frac{4}{5} - \frac{1}{2} = \frac{3}{10}$	8. $\frac{1}{2} + \frac{5}{7} = 1\frac{3}{14}$
9. $\frac{3}{4} - \frac{6}{12} = \frac{1}{4}$	10. $\frac{5}{8} + \frac{2}{4} = 1\frac{1}{8}$	11. $\frac{1}{3} + \frac{1}{2} = \frac{5}{6}$	12. $\frac{6}{7} - \frac{1}{2} = \frac{5}{14}$
13. $\frac{5}{9} - \frac{1}{2} = \frac{1}{18}$	14. $\frac{3}{6} + \frac{1}{2} = 1$	15. $\frac{2}{6} + \frac{1}{3} = \frac{2}{3}$	16. $\frac{1}{2} + \frac{7}{10} = 1\frac{1}{5}$
17. $\frac{3}{4} - \frac{3}{8} = \frac{3}{8}$	18. $\frac{4}{9} - \frac{1}{3} = \frac{1}{9}$	19. $\frac{3}{5} + \frac{1}{2} = 1\frac{1}{10}$	20. $\frac{7}{8} + \frac{1}{2} = 1\frac{3}{8}$
21. $\frac{1}{2} - \frac{2}{7} = \frac{3}{14}$	22. $\frac{1}{2} + \frac{2}{4} = 1$	23. $\frac{2}{3} + \frac{1}{2} = 1\frac{1}{6}$	24. $\frac{3}{4} - \frac{4}{12} = \frac{5}{12}$
25. $\frac{7}{8} + \frac{2}{4} = 1\frac{3}{8}$	26. $\frac{1}{6} + \frac{1}{12} = \frac{1}{4}$	27. $\frac{2}{5} - \frac{1}{3} = \frac{1}{15}$	28. $\frac{1}{2} - \frac{3}{7} = \frac{1}{14}$
29. $\frac{1}{2} - \frac{1}{5} = \frac{3}{10}$	30. $\frac{2}{3} - \frac{2}{5} = \frac{4}{15}$	31. $\frac{3}{4} + \frac{5}{8} = 1\frac{3}{8}$	32. $\frac{1}{2} + \frac{6}{7} = 1\frac{5}{14}$
33. $\frac{7}{12} - \frac{1}{6} = \frac{5}{12}$	34. $\frac{2}{3} - \frac{5}{9} = \frac{1}{9}$	35. $\frac{4}{8} + \frac{1}{4} = \frac{3}{4}$	36. $\frac{2}{3} + \frac{5}{9} = 1\frac{2}{9}$
37. $\frac{7}{9} - \frac{2}{3} = \frac{1}{9}$	38. $\frac{4}{5} + \frac{1}{2} = 1\frac{3}{10}$	39. $\frac{6}{7} + \frac{1}{2} = 1\frac{5}{14}$	40. $\frac{1}{2} - \frac{3}{8} = \frac{1}{8}$

Answer Key 0798643

1. $2\frac{8}{9} - \frac{2}{6} = 2\frac{5}{9}$	2. $\frac{1}{3} - \frac{3}{12} = \frac{1}{12}$	3. $4\frac{3}{7} + 1\frac{1}{2} = 5\frac{13}{14}$	4. $6\frac{5}{8} + 4\frac{1}{4} = 10\frac{7}{8}$
5. $4\frac{1}{6} - \frac{1}{3} = 3\frac{5}{6}$	6. $\frac{4}{5} + 2\frac{8}{10} = 3\frac{3}{5}$	7. $1\frac{1}{4} + 3\frac{1}{2} = 4\frac{3}{4}$	8. $4\frac{2}{8} - \frac{1}{2} = 3\frac{3}{4}$
9. $5\frac{4}{7} - 1\frac{1}{2} = 4\frac{1}{14}$	10. $\frac{1}{2} - \frac{2}{8} = \frac{1}{4}$	11. $2\frac{2}{4} + 4\frac{1}{2} = 7$	12. $3\frac{8}{9} + 5\frac{1}{3} = 9\frac{2}{9}$
13. $1\frac{3}{6} + 3\frac{3}{4} = 5\frac{1}{4}$	14. $2\frac{1}{3} - 1\frac{4}{9} = \frac{8}{9}$	15. $5\frac{2}{5} + 2\frac{1}{2} = 7\frac{9}{10}$	16. $4\frac{3}{6} - \frac{1}{2} = 4$
17. $\frac{1}{5} + 3\frac{2}{10} = 3\frac{2}{5}$	18. $\frac{2}{7} + 3\frac{1}{2} = 3\frac{11}{14}$	19. $1\frac{2}{3} - \frac{5}{9} = 1\frac{1}{9}$	20. $5\frac{3}{4} - 5\frac{3}{8} = \frac{3}{8}$
21. $4\frac{1}{8} - 2\frac{2}{4} = 1\frac{5}{8}$	22. $3\frac{1}{2} + 4\frac{3}{4} = 8\frac{1}{4}$	23. $2\frac{5}{9} + 1\frac{1}{6} = 3\frac{13}{18}$	24. $1\frac{1}{3} - \frac{5}{6} = \frac{1}{2}$
25. $\frac{5}{8} - \frac{1}{2} = \frac{1}{8}$	26. $5\frac{4}{6} - 5\frac{2}{4} = \frac{1}{6}$	27. $2\frac{3}{5} + 2\frac{9}{10} = 5\frac{1}{2}$	28. $3\frac{2}{6} + 3\frac{1}{3} = 6\frac{2}{3}$
29. $5\frac{7}{9} + 1\frac{1}{3} = 7\frac{1}{9}$	30. $6\frac{5}{7} - 5\frac{1}{2} = 1\frac{3}{14}$	31. $\frac{2}{3} - \frac{1}{2} = \frac{1}{6}$	32. $4\frac{3}{5} + 1\frac{4}{10} = 6$
33. $1\frac{1}{3} + 3\frac{5}{9} = 4\frac{8}{9}$	34. $2\frac{3}{7} + \frac{1}{2} = 2\frac{13}{14}$	35. $5\frac{7}{9} - 4\frac{1}{3} = 1\frac{4}{9}$	36. $4\frac{2}{4} - 1\frac{3}{6} = 3$
37. $6\frac{1}{2} + 6\frac{6}{9} = 13\frac{1}{6}$	38. $\frac{9}{12} - \frac{4}{6} = \frac{1}{12}$	39. $1\frac{1}{8} - \frac{1}{2} = \frac{5}{8}$	40. $3\frac{6}{9} + 1\frac{2}{6} = 5$

Lösungen Brüche multiplizieren

<u>1</u> $\frac{4}{15}$	<u>10</u> $\frac{2}{3}$ or $\frac{32}{3}$	<u>19</u> $\frac{2}{17}$ or $\frac{104}{17}$
<u>2</u> $\frac{35}{54}$	<u>11</u> $\frac{2}{7}$ or $\frac{30}{7}$	<u>20</u> $\frac{8}{21}$ or $\frac{1898}{21}$
<u>3</u> $\frac{3}{8}$	<u>12</u> $\frac{9}{10}$ or $\frac{99}{10}$	<u>21</u> $\frac{2}{5}$ or $\frac{7}{5}$
<u>4</u> $\frac{5}{28}$	<u>13</u> $\frac{5}{7}$ or $\frac{12}{7}$	<u>22</u> $\frac{16}{27}$ or $\frac{205}{27}$
<u>5</u> $\frac{2}{9}$	<u>14</u> $\frac{10}{13}$	<u>23</u> $\frac{23}{24}$ or $\frac{1463}{24}$
<u>6</u> $\frac{1}{14}$	<u>15</u> $\frac{11}{13}$ or $\frac{24}{13}$	<u>24</u> $\frac{94}{119}$
<u>7</u> $\frac{4}{11}$	<u>16</u> $\frac{12}{17}$ or $\frac{63}{17}$	
<u>8</u> $\frac{12}{65}$	<u>17</u> $\frac{6}{19}$ or $\frac{44}{19}$	
<u>9</u> $\frac{3}{8}$	<u>18</u> $\frac{4}{19}$	