

Addition und Subtraktion rationaler Zahlen

1. $(3,7) + (-0,6) =$

2. $(-3,1) + (-5,4) =$

3. $(-6,1) - (5,5) =$

4. $(3,5) - (3,5) =$

5. $(-6,7) - (-5,7) =$

6. $(-3,5) + (-9,5) =$

7. $(-0,2) - (9,2) =$

8. $(-5,7) + (-9,4) =$

9. $(2) + (3,1) =$

10. $(-6,9) + (5,2) =$

11. $(-0,9) - (-5,8) =$

12. $(6) + (-0,1) =$

13. $(-0,4) + (-0,4) =$

14. $(-2,7) + (2,2) =$

15. $(-1,1) + (8,5) =$

16. $(2,2) + (-8,1) =$

17. $(4,8) + (-3,1) =$

18. $(-3,7) + (8,3) =$

19. $(0,2) - (5,2) =$

20. $(-0,4) - (-8,9) =$

Lösungen (ggf. wegfallen):

1.	$(3,7)$	+	$(-0,6)$	=	3,1
2.	$(-3,1)$	+	$(-5,4)$	=	-8,5
3.	$(-6,1)$	-	$(5,5)$	=	-11,6
4.	$(3,5)$	-	$(3,5)$	=	0
5.	$(-6,7)$	-	$(-5,7)$	=	-1
6.	$(-3,5)$	+	$(-9,5)$	=	-13
7.	$(-0,2)$	-	$(9,2)$	=	-9,4
8.	$(-5,7)$	+	$(-9,4)$	=	-15,1
9.	(2)	+	$(3,1)$	=	5,1
10.	$(-6,9)$	+	$(5,2)$	=	-1,7
11.	$(-0,9)$	-	$(-5,8)$	=	4,9
12.	(6)	+	$(-0,1)$	=	5,9
13.	$(-0,4)$	+	$(-0,4)$	=	-0,8
14.	$(-2,7)$	+	$(2,2)$	=	-0,5
15.	$(-1,1)$	+	$(8,5)$	=	7,4
16.	$(2,2)$	+	$(-8,1)$	=	-5,9
17.	$(4,8)$	+	$(-3,1)$	=	1,7
18.	$(-3,7)$	+	$(8,3)$	=	4,6
19.	$(0,2)$	-	$(5,2)$	=	-5
20.	$(-0,4)$	-	$(-8,9)$	=	8,5

Addition und Subtraktion rationaler Zahlen (Brüche)

$$1. \quad \frac{-1}{15} + \frac{-2}{15} =$$

$$2. \quad \frac{-2}{6} - \frac{-6}{14} =$$

$$3. \quad \frac{-4}{9} - \frac{-12}{27} =$$

$$4. \quad \frac{-5}{5} - \frac{17}{18} =$$

$$5. \quad \frac{6}{6} + \frac{16}{14} =$$

$$6. \quad \frac{13}{24} - \frac{19}{13} =$$

$$7. \quad \frac{4}{6} + \frac{-5}{15} =$$

$$8. \quad \frac{8}{18} - \frac{10}{6} =$$

$$9. \quad \frac{-13}{9} - \frac{-1}{22} =$$

$$10. \quad \frac{-22}{2} - \frac{-28}{15} =$$

Lösungen (ggf. wegfallen):

$$1. \quad \frac{-1}{15} + \frac{-2}{15} = \frac{-1}{15} + \frac{-2}{15} = - \frac{3}{15} = - \frac{1}{5}$$

$$2. \quad \frac{-2}{6} - \frac{-6}{14} = \frac{-14}{42} - \frac{-18}{42} = \frac{4}{42} = \frac{2}{21}$$

$$3. \quad \frac{-4}{9} - \frac{-12}{27} = \frac{-12}{27} - \frac{-12}{27} = 0$$

$$4. \quad \frac{-5}{5} - \frac{17}{18} = \frac{-90}{90} - \frac{85}{90} = - \frac{175}{90} = -1 \frac{17}{18}$$

$$5. \quad \frac{6}{6} + \frac{16}{14} = \frac{42}{42} + \frac{48}{42} = \frac{90}{42} = 2 \frac{1}{7}$$

$$6. \quad \frac{13}{24} - \frac{19}{13} = \frac{169}{312} - \frac{456}{312} = - \frac{287}{312}$$

$$7. \quad \frac{4}{6} + \frac{-5}{15} = \frac{20}{30} + \frac{-10}{30} = \frac{10}{30} = \frac{1}{3}$$

$$8. \quad \frac{8}{18} - \frac{10}{6} = \frac{8}{18} - \frac{30}{18} = - \frac{22}{18} = -1 \frac{2}{9}$$

$$9. \quad \frac{-13}{9} - \frac{-1}{22} = \frac{-286}{198} - \frac{-9}{198} = - \frac{277}{198} = -1 \frac{79}{198}$$

$$10. \quad \frac{-22}{2} - \frac{-28}{15} = \frac{-330}{30} - \frac{-56}{30} = - \frac{274}{30} = -9 \frac{2}{15}$$

Multiplikation und Division rationaler Zahlen

1. $(4) \cdot (3) =$

2. $(-54) : (9) =$

3. $(9) \cdot (4) =$

4. $(5) \cdot (-2) =$

5. $(35) : (5) =$

6. $(24) : (-8) =$

7. $(3) : (-3) =$

8. $(7) \cdot (4) =$

9. $(10) : (-2) =$

10. $(6) : (-2) =$

11. $(-40) : (-5) =$

12. $(8) : (1) =$

13. $(-24) : (4) =$

14. $(-27) : (-9) =$

15. $(28) : (4) =$

16. $(3) \cdot (-3) =$

17. $(3) \cdot (4) =$

18. $(11) \cdot (-1) =$

19. $(11) \cdot (9) =$

20. $(40) : (-5) =$

Lösungen (ggf. wegfallen):

1.	(4)	\cdot	(3)	$=$	12
2.	(-54)	$:$	(9)	$=$	-6
3.	(9)	\cdot	(4)	$=$	36
4.	(5)	\cdot	(-2)	$=$	-10
5.	(35)	$:$	(5)	$=$	7
6.	(24)	$:$	(-8)	$=$	-3
7.	(3)	$:$	(-3)	$=$	-1
8.	(7)	\cdot	(4)	$=$	28
9.	(10)	$:$	(-2)	$=$	-5
10.	(6)	$:$	(-2)	$=$	-3
11.	(-40)	$:$	(-5)	$=$	8
12.	(8)	$:$	(1)	$=$	8
13.	(-24)	$:$	(4)	$=$	-6
14.	(-27)	$:$	(-9)	$=$	3
15.	(28)	$:$	(4)	$=$	7
16.	(3)	\cdot	(-3)	$=$	-9
17.	(3)	\cdot	(4)	$=$	12
18.	(11)	\cdot	(-1)	$=$	-11
19.	(11)	\cdot	(9)	$=$	99
20.	(40)	$:$	(-5)	$=$	-8

Multiplikation und Division rationaler Zahlen (Brüche)

$$1. \quad \frac{5}{6} \cdot \frac{2}{-15} =$$

$$2. \quad \frac{-13}{-35} : \frac{-18}{-7} =$$

$$3. \quad \frac{-13}{2} \cdot \frac{2}{-221} =$$

$$4. \quad \frac{-15}{-4} \cdot \frac{-14}{15} =$$

$$5. \quad \frac{10}{2} \cdot \frac{-10}{40} =$$

$$6. \quad \frac{9}{36} : \frac{8}{-18} =$$

$$7. \quad \frac{-6}{80} : \frac{5}{-10} =$$

$$8. \quad \frac{-14}{-6} : \frac{-9}{-6} =$$

$$9. \quad \frac{-20}{7} \cdot \frac{-3}{-140} =$$

$$10. \quad \frac{-13}{-2} \cdot \frac{-20}{208} =$$

Lösungen (ggf. wegfallen):

$$1. \quad \frac{5}{6} \cdot \frac{2}{-15} = - \frac{1}{9}$$

$$2. \quad \frac{-13}{-35} : \frac{-18}{-7} = \frac{-13}{-35} \cdot \frac{-7}{-18} = \frac{13}{90}$$

$$3. \quad \frac{-13}{2} \cdot \frac{2}{-221} = \frac{1}{17}$$

$$4. \quad \frac{-15}{-4} \cdot \frac{-14}{15} = -3 \frac{1}{2}$$

$$5. \quad \frac{10}{2} \cdot \frac{-10}{40} = -1 \frac{1}{4}$$

$$6. \quad \frac{9}{36} : \frac{8}{-18} = \frac{9}{36} \cdot \frac{-18}{8} = - \frac{9}{16}$$

$$7. \quad \frac{-6}{80} : \frac{5}{-10} = \frac{-6}{80} \cdot \frac{-10}{5} = \frac{3}{20}$$

$$8. \quad \frac{-14}{-6} : \frac{-9}{-6} = \frac{-14}{-6} \cdot \frac{-6}{-9} = 1 \frac{5}{9}$$

$$9. \quad \frac{-20}{7} \cdot \frac{-3}{-140} = - \frac{3}{49}$$

$$10. \quad \frac{-13}{-2} \cdot \frac{-20}{208} = - \frac{5}{8}$$