



## Englische Übungen zu Ganze Zahlen

- A thermometer shows  $-3^{\circ}\text{C}$ . How much did the temperature change if it showed...before?
  - $+5^{\circ}\text{C}$
  - $+1^{\circ}\text{C}$
  - $0^{\circ}\text{C}$
  - $-3^{\circ}\text{C}$
  - $-8^{\circ}\text{C}$
- An account has a balance of  $-358\text{€}$ . How many Euros must be paid into the account to reach a balance of
  - $-50\text{€}$
  - $0\text{€}$
  - $+145\text{€}$
- Which statements are incorrect? Correct them!
  - $|-13| = +13$
  - $|-20| < +17$
  - $|-23| > -27$
  - $-|-13| = +13$
  - $|-12| > -12$
  - $-|-1| = -1$
  - $|-7| \geq |+7|$
  - $-|-7| \leq -7$
  - $-|-7| = -7$
  - $-8 < |-1|$
  - $|-11| = |+11|$
  - $|+8| \geq 8$

- Add the numbers from the top row to the numbers from the left column!

a.

	$(-8)$	$(+2)$	$(-3)$	$0$
$+5$				
$-6$				

b.

	$(-10)$	$(+9)$	$(-3)$	$(-1)$
$-11$				
$0$				





5. Subtract the numbers from the top row from the numbers from the left column!

a.

	(-8)	(+2)	(-3)	0
+6				
-2				
-9				

b.

	(-10)	(+9)	(-3)	(-1)
-6				
-12				
+9				

6. Calculate the results!

a.  $(+3) - (-8) =$

e.  $(-12) - (+9) =$

b.  $(+4) - (-2) =$

f.  $(-1) - (+7) =$

c.  $(-1) - (+5) =$

g.  $(+45) - (-24) =$

d.  $(-7) - (-2) =$

h.  $(+35) - (+48) =$

7. Compare the results!

a.  $3 - (-4) - 6 =$

e.  $-3 - (+4) - 6 =$

b.  $3 - 4 - (-6) =$

f.  $-3 - (-4) - (+6) =$

c.  $-3 - (-4) + 6 =$

g.  $3 - (4 - 6) =$

d.  $-3 - 4 - (-6) =$

h.  $3 - (-4 - 6) =$

8. Fill in the correct symbol: „<“, „>“ or „=“

a.  $(+9) + (-17)$        $(+9) - (-14)$

b.  $(+12) - (+23)$        $(+12) + (-23)$

c.  $6 - 17$        $6 + 17$

d.  $-5 - (-7)$        $7 - 5$





9. Multiply the numbers from the top row with the numbers from the left column!

a.

	(-7)	(+3)	0	(-2)
-8				
+11				
+13				

b.

	(+13)	0	(-9)	(+12)
-7				
+9				
-11				

10. Which sign does the product of three integers have

- when two of them are positive and one is negative,
- when two of them are negative and one is positive,
- when all of them are negative?

11. Compare the results. Is the order of dividend and divisor important?

a.  $(+15) : (-5) =$                       b.  $(-20) : (-2) =$                       c.  $(-72) : (+18) =$   
 $(-5) : (+15) =$                        $(-2) : (-20) =$                        $(+18) : (-72) =$

12. Compare the results!

- $|156| : (-13) + (-112) : |16| =$
- $156 : |-13| + |-112| : 16 =$
- $121 : |11| + |96| : (-12) =$
- $(-121) : |-11| - |-96| : (-12) =$





## Vocabulary

Englisch	Deutsch
account	Konto
balance	Kontostand
to compare	vergleichen
sign	Vorzeichen
integer	ganze Zahl
order	Reihenfolge
important	wichtig
product	Produkt (Ergebnis der Multiplikation)
dividend	Dividend (Erster Teil der Division)
divisor	Divisor (Zweiter Teil der Division)
to calculate	berechnen





## Solutions

1. a.  $8^{\circ}\text{C}$       b.  $4^{\circ}\text{C}$       c.  $3^{\circ}\text{C}$       d.  $0^{\circ}\text{C}$       e.  $5^{\circ}\text{C}$

2. a. 308€      b. 358€      d. 503€

3.

a.  $|-13| = +13$  true

b.  $|-20| < +17$  false,  $|-20| > +17$

c.  $|-23| > -27$  true

d.  $-|-13| = +13$  false,  
 $-|-13| < +13$

e.  $|-12| > -12$  true

f.  $-|-1| = -1$  true

g.  $|-7| \geq |+7|$  true

h.  $-|-7| \leq -7$  true

i.  $-|-7| = -7$  true

j.  $-8 < |-1|$  true

k.  $|-11| = |+11|$  true

l.  $|+8| \geq 8$  true

4.

a.

	(-8)	(+2)	(-3)	0
+5	-3	+7	+2	+5
-6	-14	-4	-9	-6

b.

	(-10)	(+9)	(-3)	(-1)
-11	-21	-2	-14	-12
0	-10	+9	-3	-1

5.

a.

	(-8)	(+2)	(-3)	0
+6	+14	+4	+9	+6
-2	+6	-4	+1	-2
-9	-1	-11	-6	-9

b.

	(-10)	(+9)	(-3)	(-1)
-6	+4	-15	-3	-5
-12	+2	-21	-9	-11
+9	+19	0	+12	+10

6.

a.  $3 + 8 = 11$

b.  $4 + 2 = 6$

c.  $-1 - 5 = -6$

d.  $-7 + 2 = -5$

e.  $-12 - 9 = -21$

f.  $-1 - 7 = -8$

g.  $45 + 24 = 69$

h.  $35 - 48 = -13$





7.

- a.  $3 - (-4) - 6 = 1$   
b.  $3 - 4 - (-6) = 5$   
c.  $-3 - (-4) + 6 = 7$   
d.  $-3 - 4 - (-6) = -1$   
e.  $-3 - (+4) - 6 = -13$   
f.  $-3 - (-4) - (+6) = -5$   
g.  $3 - (4 - 6) = 5$   
h.  $3 - (-4 - 6) = 13$

8.

- a.  $(+9) + (-17) < (+9) - (-14)$   
b.  $(+12) - (+23) = (+12) + (-23)$   
c.  $6 - 17 < 6 + 17$   
d.  $-5 - (-7) = 7 - 5$

9.

	(-7)	(+3)	0	(-2)
-8	+56	-24	0	+16
+11	-77	+33	0	-22
+13	-91	+39	0	-26

b.

	(+13)	0	(-9)	(+12)
-7	-91	0	+63	-84
+9	+117	0	-81	+108
-11	-143	0	+99	-132

10.

- a. -,  
b. +,  
c. -

11.

- a. -3, not possible in  $\mathbb{Z}$   
b. +10, not possible in  $\mathbb{Z}$   
c. -4, not possible in  $\mathbb{Z}$

The order is important!

12.

- a. -19, 19  
b. 3, 19

