RD SHARMA

Solutions

Class 6 Maths

Chapter 5

Ex 5.4

Subtraction of Integers. Exercise-5.4.

Solution-01.

(i) using the rule for subtraction, we have

$-5 - 12 = -17.$

(ii) In order to subtract -12 from 8,

$8 - (-12) = 8 + 12 = 20.$

(iii) $-135 - (-225) = 225 - 135$

$= 90$

(iv) $101 - 1001 = -900$

(v) $3126 - (-812) = 3126 + 812$

$= 3938.$

(vi) $-8 - 7560 = -7568$

(vii) $-4109 - [-3978] = -4109 + 3978$

$= -131$

(viii) $-1005 - 0 = -1005$

Solution-02:

(i) $-27 - (-23) = -27 + 23$

$= 23 - 27$

$= -4$

(ii) $-47 - 18 - (-35) = -35 + 35$

$= 0$

(iii) $-12 - (-5) - (-125) + 270 = -12 + 5 + 125 + 270$

$= 400 - 12$

$= 388.$

(iv) $373+(-245)+(-373)+145+3000 = 373-245$

$-373+3145$

$= 3145+373-373-245$

$= 3145-245$

$= 2900.$

(v) $1-475-475-475-475+1900 = 1-950-950+1900$

$= 1900+1-1900$

$= 1.$

(vi) $(-1)+(-304)+304+304+(-304)+1 = -1+1-304$

$+304-304+304$

$= 0.$

Solution-03:-

The sum of -5020 and 2320 is $-5020+2320$

$= 2320-5020$

$= -2700.$

$\Rightarrow -(-2700)+(-709) = -709-(-2700)$

$= -709+2700$

$= 1991$

Solution-04:-

Sum of -1250 and $1138 = -1250 + 1138$

$= 1138 - 1250$

$= -112.$

Sum of 1136 and $-1272 = 1136 - 1272$

$= -136$

$\Rightarrow -136 - (-112) = -136 + 112$

$= -24.$

Solution-05:

Sum of 233 and $-147 = 233 - 147$

$= 86.$

$\Rightarrow 86 - (-284) = 86 + 284$

$= 370.$

Solution-06:

Given that,

Sum of two integer's $= 238.$

one of the integer $= -122.$

Required integer $= -(-122) + 238$

$= 238 + 122$

$= 360.$

Solution-07:

Required integer $= -223 - 172$

$= -395$.

Solution-08:

(i) $-8-24+31-26-28+7+19-18-8+33$

$= -8-24-26-28-18-8+31+7+19+33$

$= -32-26-28-26+38+19+33$

$= 38-32-26-28+33-26+19.$

$= 6-26-28+7+19$

$= 6-28-26+26$

$= 6-28$

$= -22.$

(ii) $-26-20+33-(-33)+21+24-(-25)-26-14-34$

$= -46+33+33+21+24+25-26-14-34$

$= -46+66+21+24+25-74$

$= -46+66+70-74$

$= -46-4+66$

$= -50+66$.

$= 66-50$

$= 16.$

Solution-09 :-

$1-2+3-4+5-6+7-8+9-10+11-12+13-14+15-16$

$= -1-1-1-1-1-1-1-1$

$= -8.$

solution-10 :-

(i) if the number of term is 10

$5+(-5)+5+(-5)+5+(-5)+5+(-5)+5+(-5)$

$= 5-5+5-5+5-5+5-5$

$= 0.$

(ii) if the number of terms is 11.

$5+(-5)+5+(-5)+5+(-5)+5+(-5)+5+(-5)+5$

$= 5-5+5-5+5-5+5-5+5-5+5$

$= 5.$

Solution-11 :-

(i) $(-6)+(-9) * (-6)-(-9)$

$-15 < 9-6$

$-15 < 3.$

(ii) $(-12)+12 > -12-12$

$0 > -24$

(iii) $(-20)+20 * 20-65$

$0 > -45.$

(iv) $28+10 * -16+76$

$30 < 60.$

Solution-12 :-

$a \Delta b = -a + b - (-2)$.

(i) $4 \Delta 3 = -4 + 3 - (-2)$

$= -4 + 3 + 2$

$= 5 - 4$

$= 1$

(ii) $(-2) \Delta (-3) = -(-2) + (-3) - (-2)$

$= 2 - 3 + 2$

$= 4 - 3$

$= 1$.

(iii) $6 \Delta (-5) = -6 + (-5) - (-2)$

$= -6 - 5 + 2$

$= -11 + 2$

$= -9$.

(iv) $(-5) \Delta 6 = 5 + 6 - (-2)$

$= 5 + 6 + 2$

$= 13$.

Solution-13 :-

Glr a and b are two integers

$a = a$

$a = a + 1$

Value $= a - b$

$= a - a + 1$

$= 1$

Solution -14 :-

$a = b+1$

$b = b$.

Value of $a-b = b+1-b$

$= 1$.

Solution-15 :-

(i) False

(ii) True

(iii) True

(iv) True

(v) True

(vi) False

(vii) True

(viii) True.

Solution-16 :-

(i) $-7+7 = 0$

(ii) $29+(-29) = 0$.

(iii) $132+(-132) = 0$

(iv) $-14+36 = 22$

(v) $-1256+514 = -742$

(vi) $-3305-1234 = -4539$