

Name: _____ Date: _____

Multiplication of Integers

Q1. $(-51) \times (-17)$ is same as $(-17) \times (-51)$. True/False

Sol.

Q2. Write a pair of integers whose product is -12 and whose difference is 7 .

Sol.

Q3. A cold warehouse requires that the temperature to be lowered from 38°C at the rate of 6°C every hour. What will be the temperature 8 hours after the process begins?

Sol.

Q4. A company earns a profit of rupees 8000 per truck sold and loss of rupees 500 per tractor. If the company sells $3,000$ trucks in a month and 1000 tractor in a month. What is its profit and loss?

Sol.

Answers

Multiplication of Integers

Q1. $(-51) \times (-17)$ is same as $(-17) \times (-51)$. True/False

Sol. True

Q2. Write a pair of integers whose product is -12 and whose difference is 7 .

Sol. There are few pairs of integers whose product is -12 .

e.g. -1×12

-12×1

$4 \times (-3)$

$3 \times (-4)$

$2 \times (-6)$

-2×6

But difference of -3 and 4 or -4 and 3 is 7 . So the required pair of integers is $-3, 4$ and $-4, 3$.

Q3. A cold warehouse requires that the temperature to be lowered from 38°C at the rate of 6°C every hour. What will be the temperature 8 hours after the process begins?

Sol. Initial temperature = 38°C

Change in temperature per hour = -6°C

Change in temperature after 8 hrs. = $-6 \times 8 = -48^{\circ}\text{C}$

Final temperature = $38^{\circ}\text{C} + (-48^{\circ}\text{C}) = -10^{\circ}\text{C}$

Q4. A company earns a profit of rupees 8000 per truck sold and loss of rupees 1000 per tractor. If the company sells 30 trucks in a month and 10 tractor in a month. What is its profit and loss?

Sol. Profit earned by the company = $(+8000) \times 30 = +240000$

Loss suffered by the company = $(-1000) \times 10 = -10000$

Total profit earned = $240000 + (-10000) = \text{Rupees } 230000$