

6th - Integers I



Integers: The collections of negative numbers along with the collection of whole numbers are known as integers.

- If profit is considered as positive, state the following as profit:
 - Profit of Rs 50
 - Loss of Rs 25
- If depth is considered as positive, express the following as depth:
 - 20 meters deep
 - 30 meters height
- Insert $>$ or $<$:
 - $8 \underline{\quad} -8$
 - $-10 \underline{\quad} -6$
- Arrange the following integers in ascending order: -20, -65, 25, 5, and 10.
- Use $+$ or $-$ to represent the following (consider above mean sea level, profit, rise, north, right, deposit as positive, whereas below mean sea level, loss, fall, south, left, withdrawal as negative).

a) Profit of Rs 50 _____	b) A loss of Rs 50 _____
c) 50 km south _____	d) 50 km north _____
e) 40°C below 0°C _____	f) 40°C above 0°C _____

6. Using the number line, introduce $>$, $=$ or $<$ in the circles in each case.

a) $0 \underline{\quad} (-3)$	b) $(-4) \underline{\quad} 1$	c) $(-7) \underline{\quad} (-5)$
d) $0 \underline{\quad} 4$	e) $1 \underline{\quad} 0$	f) $-10 \underline{\quad} -10$

7. Write all the integers between:

a) -4 and 0	b) -6 and -3	c) -3 and +3
d) 4 and 8	e) 0 and 6	f) -4 and 2

8. Put $>$ or $<$ in each circle below.

a) $0 \underline{\quad} -1$	b) $-8 \underline{\quad} -14$	c) $8 \underline{\quad} -3$	d) $-17 \underline{\quad} -6$
e) $-6 \underline{\quad} +12$	f) $3 \underline{\quad} 7$	g) $-9 \underline{\quad} 1$	h) $-6 \underline{\quad} -1$

9. Circle the greater number in each pair.

a) -1, -23	b) -7, -23	c) -627, 0
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10. Arrange the numbers in ascending order.

a) -6, 0, -7, 3, -10, 4	b) 3, 6, -3, 0, -8, 1
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11. Write the next three integers in each of the following pattern.

a) 6, 3, 0, -3, -10	b) -16, -8, -0, +8	c) 17, 12, 7, 2
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Absolute value of an integer: The absolute value of an integer is the distance of that integer from 0 irrespective of the direction, i.e. negative or positive.

- State the absolute values of the following:
 - $|-82|$
 - $|121|$
- State the opposites of the following:
 - 37
 - 59
- Find the additive inverse of:
 - 127
 - 29
- State which temperature is lower in each case?
 - -4°C or -10°C
 - 7°C or -7°C
 - -1°C or 1°C
- Write the absolute values of the following integers.
 - $|-10|$
 - $|84|$
 - $|-73|$
- Write the exact opposites of the following integers.
 - 27
 - 301
 - +61