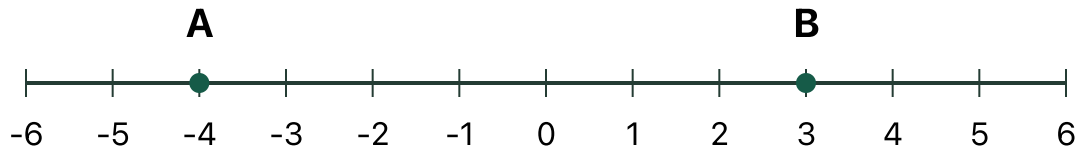


Integer Number Line Worksheets

Compare your reasoning, not just the final result. Equivalent correct methods are welcome.

Public practice with published answers. This is not a full-topic readiness assessment.

1. Read the values of A and B on the number line. Explain how you used the interval size.



Locate A and B

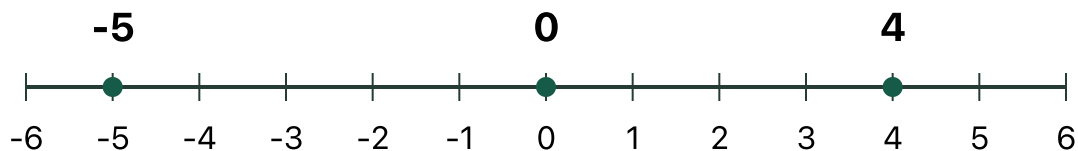
Worked solution 1: A = -4; B = 3.

1. Each interval is 1 unit.
2. A is four intervals left of zero. B is three intervals right of zero.

2. Plot and label -5, 0 and 4 on the blank number line. Then write them from least to greatest.

Worked solution 2: $-5 < 0 < 4$.

1. Put -5 five intervals left of zero and 4 four intervals right of zero.
2. Reading left to right gives -5, 0, 4.



Completed number line

3. Fill each gap with $<$, $>$ or $=$ and explain: -9 ___ -3 ; 0 ___ -1 ; -4 ___ 4 .

Worked solution 3: $-9 < -3$; $0 > -1$; $-4 < 4$.

1. -9 is left of -3 . Zero is right of -1 .
2. Every negative number is left of zero and every positive number is right of zero, so $-4 < 4$.

4. The morning temperature is -3°C and the afternoon temperature is 5°C . How many degrees did it rise? Show the move through zero.

Worked solution 4: It rose 8°C .

1. From -3 to 0 is a rise of 3 degrees.
2. From 0 to 5 is another 5 degrees. The total rise is $3 + 5 = 8$ degrees.

5. Two points are both 7 units from zero. Name both values. Explain why there are two answers.

Worked solution 5: -7 and 7 .

1. A distance of 7 units can be measured to the left or to the right of zero.
2. The negative sign records the left-hand position; it does not make the distance negative.

6. An elevator starts on floor -2 , rises 6 floors, then descends 9 floors. Where does it finish? Describe both moves and its total change from the start.

Worked solution 6: Floor -5 ; total change -3 floors.

1. First move: $-2 + 6 = 4$.
2. Second move: $4 - 9 = -5$.
3. The net change is $+6 - 9 = -3$. Floor -5 is three floors below the starting floor -2 .