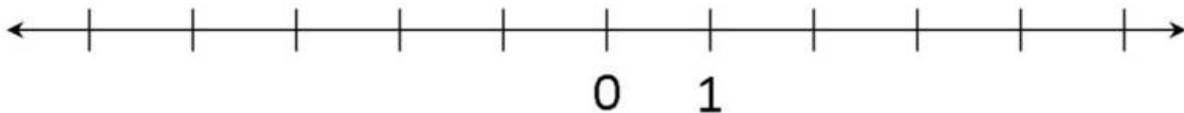


6.NS Jumping Flea

Alignments to Content Standards: 6.NS.C.7

Task

A flea is jumping around on the number line.



- If he starts at 1 and jumps 3 units to the right, then where is he on the number line? How far away from zero is he?
- If he starts at 1 and jumps 3 units to the left, then where is he on the number line? How far away from zero is he?
- If the flea starts at 0 and jumps 5 units away, where might he have landed?
- If the flea jumps 2 units and lands at zero, where might he have started?
- The absolute value of a number is the distance it is from zero. The absolute value of the flea's location is 4 and he is to the left of zero. Where is he on the number line?

IM Commentary

This purpose of this task is to help students understand the absolute value of a number as its distance from 0 on the number line. The context is not realistic, nor is meant to be; it is a thought experiment to help students focus on the relative position of numbers on the number line.

Edit this solution

Solution

It would be a good idea to use a number line to illustrate these solutions.

- a. If he starts at 1 and jumps 3 units to the right, then the flea is at 4. He is 4 units away from zero.
- b. If he starts at 1 and jumps 3 units to the left, then the flea is at -2 . He is $|-2| = 2$ units away from zero.
- c. If the flea starts at 0 and jumps five units away, then he is either at -5 or 5.
- d. If the flea lands on 0 and jumped 2 units, then he started at either -2 or 2.
- e. If the absolute value of the flea's location is 4, then he is either at -4 or 4. Since he is to the left of zero, the flea is at -4 .



6.NS Jumping Flea
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