

Finding values introduction



1 Darken the landmarks, then find fast

Use the floor number line the class built — tape and number cards from zero to twenty. Point out that finding a number by counting from zero every single time is slow.

“Here is our floor number line, zero to twenty. If we count from zero every time, it takes forever.”

Choose the landmarks — 0, 5, 10, 15 and 20 — and make those marks stand out by placing a big dark marker on each. Now they are easy to spot from across the line.

“Let us make some marks stand out. A big dark marker on zero, five, ten, fifteen, twenty — these are our major interval markers, our landmarks.”

To find a number, go to the nearest dark landmark and count on from there — much faster than starting at zero every time.

“To find fourteen, do not start at zero. Jump to ten, the nearest landmark, and count on — eleven, twelve, thirteen, fourteen.”

The middle is a landmark too — ten is halfway along zero to twenty, and five is halfway to ten.

“Ten is halfway along the line. Five is halfway to ten. The middle helps us find our place quickly.”

Compare the two ways — counting to seventeen from zero is a long count; from fifteen it is just two steps on. The dark landmarks make finding faster, and we make fewer mistakes.

“From zero to seventeen is a long count. From fifteen it is just two. The landmarks make it faster — and we slip up less.”

Finding values — major interval marker cards (teacher)

Print on A4 landscape (enlarge to A3 for the floor). Cut out. Place a dark marker on 0, 5, 10, 15 and 20 on the class floor number line so the landmarks stand out.



LANDMARK

0

LANDMARK

5

LANDMARK

10

LANDMARK

15

LANDMARK

20

Finding values — find-it cards (teacher)

Read a card aloud. Students go to the nearest dark landmark on the floor line and count on to find the number — not counting from zero.



Find 14

Nearest landmark? Count on from there.

Find 7

Start at 5, count on 2.

Find 18

Start at 20, step back 2.

Find 11

Which landmark is nearest?