Understand and use representations of directed numbers

1 –1 = –1 and 1 = 1

What is the total value of each set of counters?

a) 1 1 = ☐

–1 –1 = ☐

b) 1 1 1 1 = ☐

–1 –1 –1 –1 = ☐

c) 1 1 1 1 1 1 1 = ☐

–1 –1 –1 –1 –1 –1 –1 = ☐

d) 1 1 1 1 1 1 1 1 1 1 1 = ☐

–1 –1 –1 –1 –1 –1 –1 –1 –1 –1 –1 = ☐

2 Circle the number that is closest to zero.

2 **–3** **–1** **4**

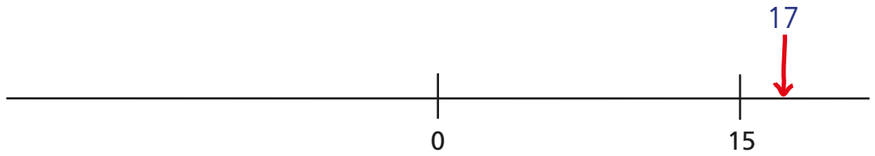
Explain your answer.

_____

_____

3 Here is a number line.

Mo has marked the number 17



a) Mark the number –17 on the number line.

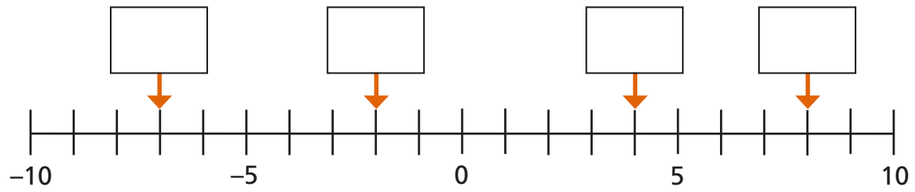
b) How do you know where –17 is?

_____

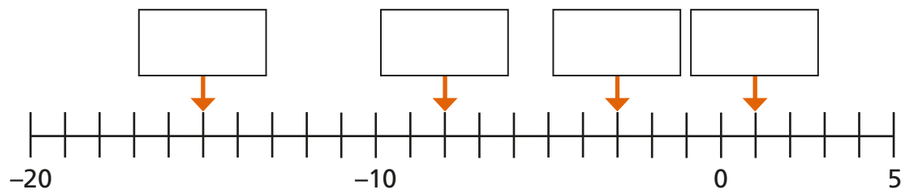
_____

4 Write the missing numbers.

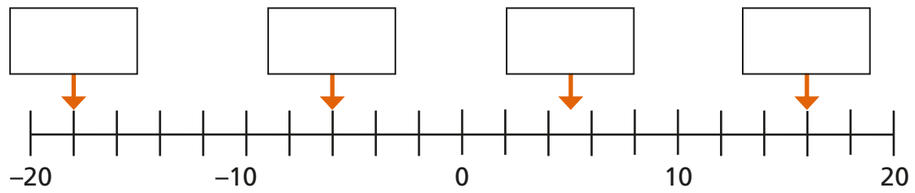
a)



b)



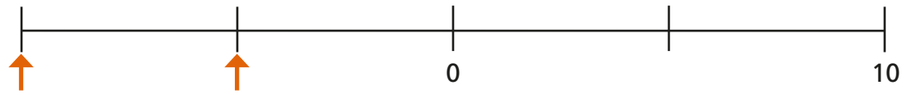
c)



5 What numbers are the arrows pointing to?

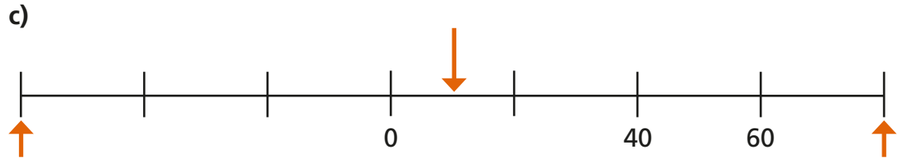
Label them on the number lines.

a)



b)

c)

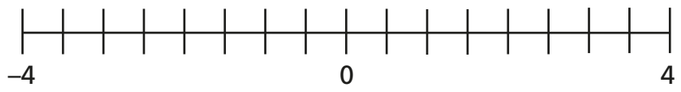


Discuss with a partner how you worked out the numbers.

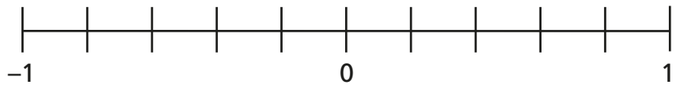
6 What is each number line going up in?

Give your answer as a fraction.

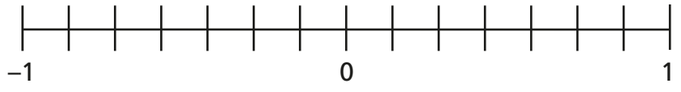
a)



b)

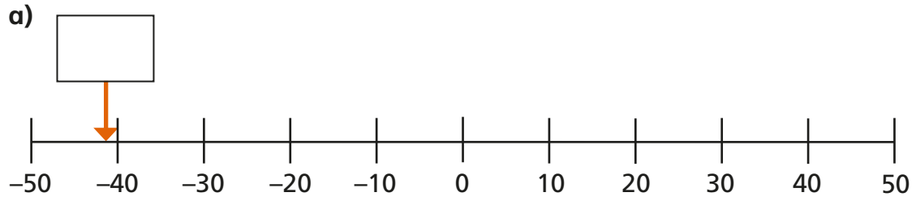


c)

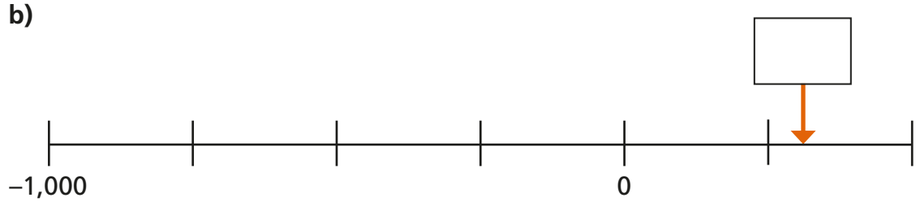


7 Estimate the number the arrow is pointing to on the number line.

a)

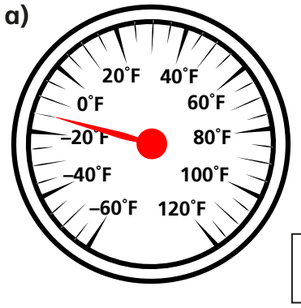


b)



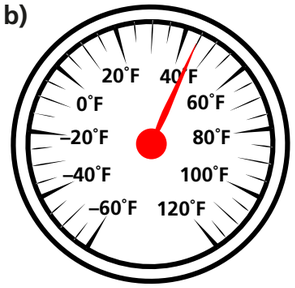
8 What temperatures are shown on the thermometers?

a)



°F

b)



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Compare answers with a partner. Did you get the same?

9 Complete these linear sequences.

a) –10, ☐, 0, 5, ☐

b) ☐, ☐, –7, ☐, ☐, –1, ☐, 3, 5

c) 16, ☐, ☐, 4, ☐, ☐, –8, –12

d) ☐, –0.8, ☐, –0.4, ☐, ☐, 0.2