

-20 to 20 Number Line



-20 to 20 Number Line



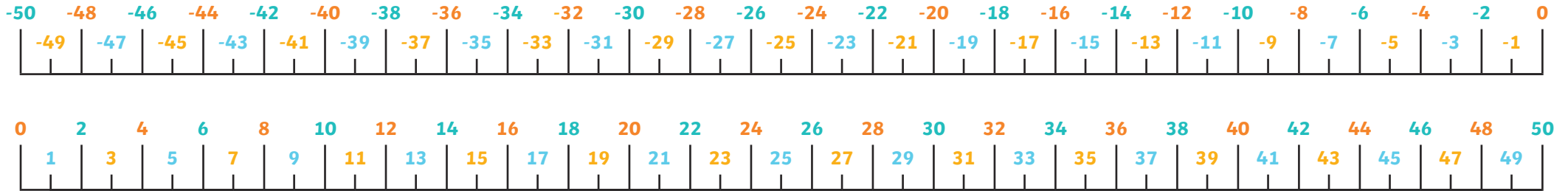
-20 to 20 Number Line



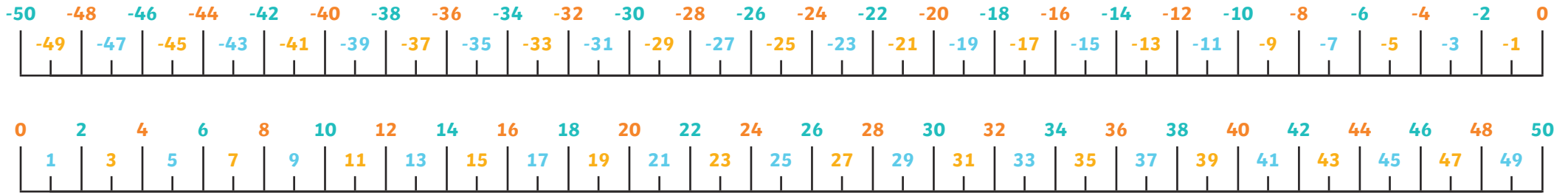
-20 to 20 Number Line



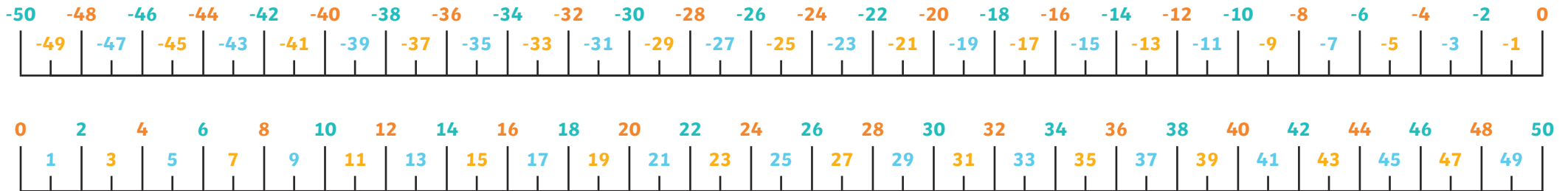
-50 to 50 Number Line



-50 to 50 Number Line



-50 to 50 Number Line

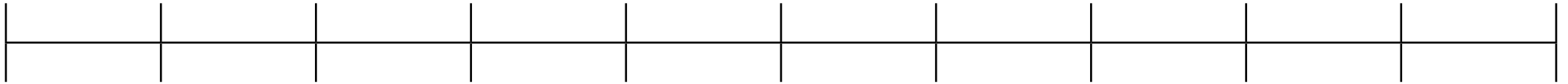


Blank Number Lines

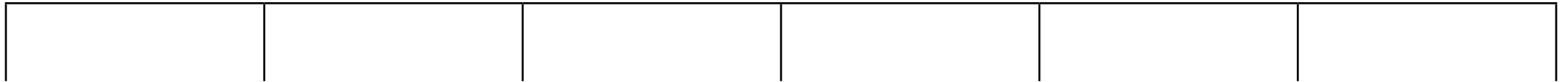
To interpret negative numbers in context.



Number Line A



Number Line B



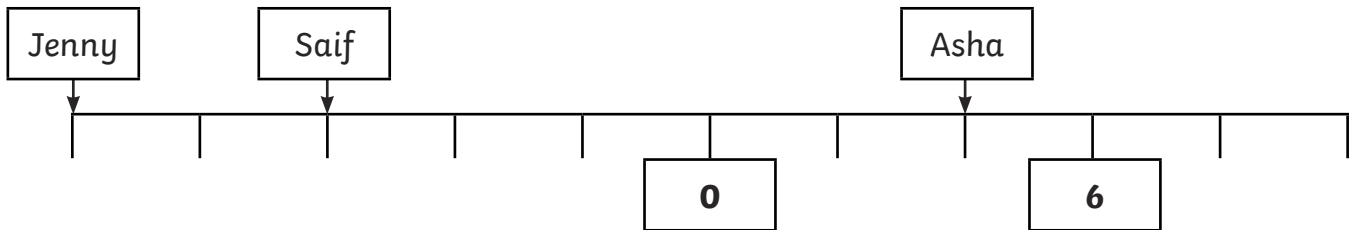
Computer Conundrums

To interpret negative numbers in context.



Level 1

These players are all at level 1 of the computer game. Can you find each player's score?



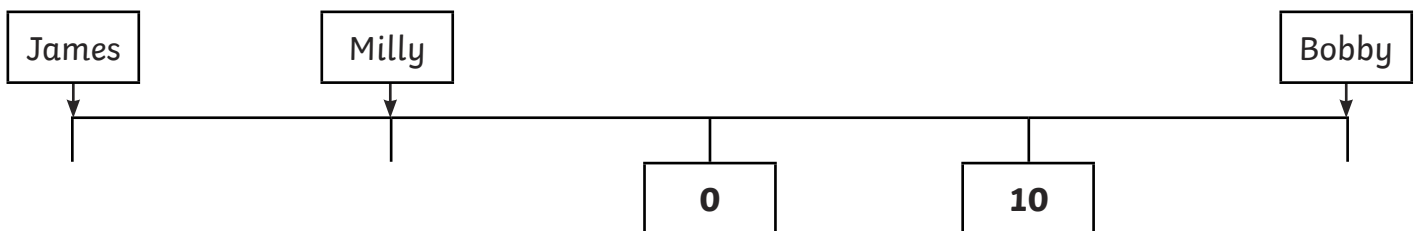
Jenny:

Saif:

Asha:

Level 2

At level 2, these players' scores are shown on a different scale. Work out each player's score.



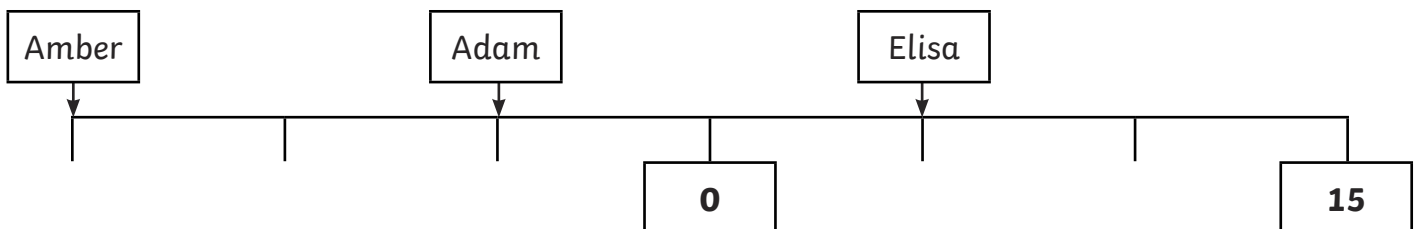
James:

Milly:

Bobby:

Level 3

These players have made it to level 3 of the computer game. Find each player's score.



Amber:

Adam:

Elisa:

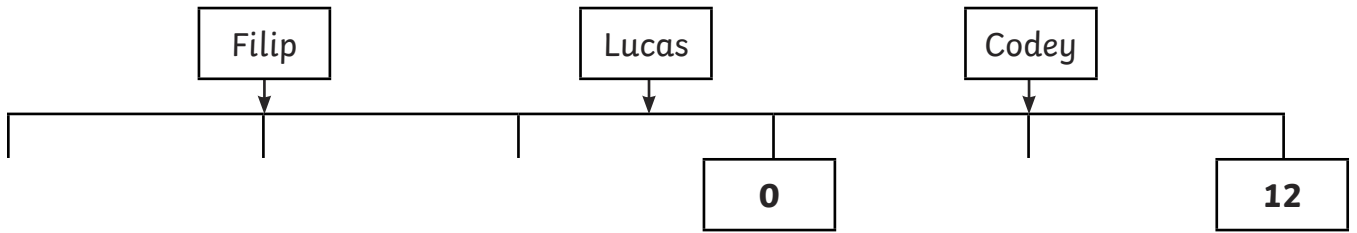
Computer Conundrums

To interpret negative numbers in context.



Level 1

These players are all at level 1 of the computer game. Can you find each player's score?



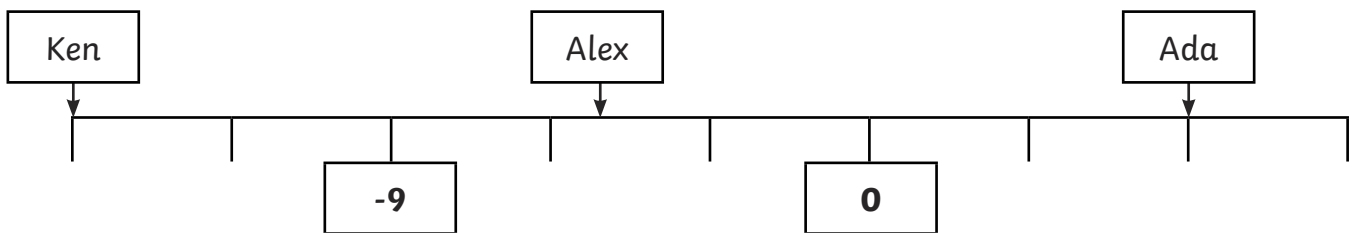
Filip:

Lucas:

Codey:

Level 2

At level 2, these players' scores are shown on a different scale. Work out each player's score.



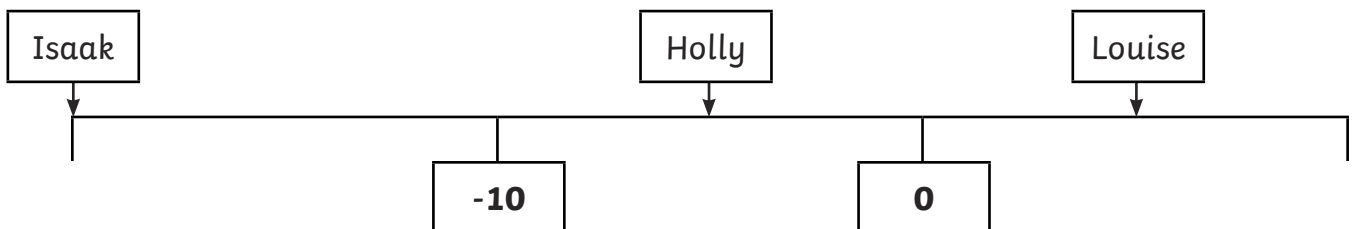
Ken:

Alex:

Ada:

Level 3

These players have made it to level 3 of the computer game. Find each player's score.



Isaak:

Holly:

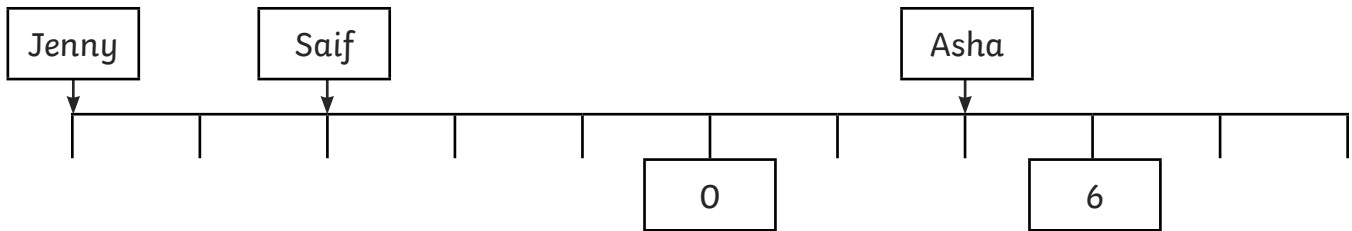
Louise:

What is the difference between Louise and Holly's scores? _____

Computer Conundrums Answers

Level 1

These players are all at level 1 of the computer game. Can you find each player's score?



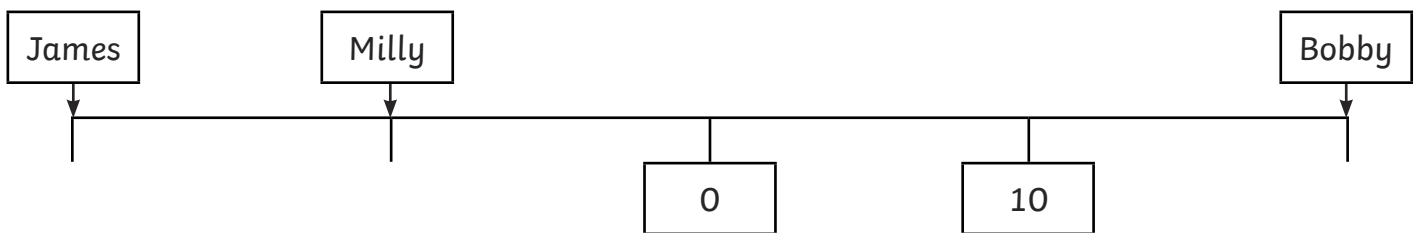
Jenny: **-10**

Saif: **-6**

Asha: **4**

Level 2

At level 2, these players' scores are shown on a different scale. Work out each player's score.



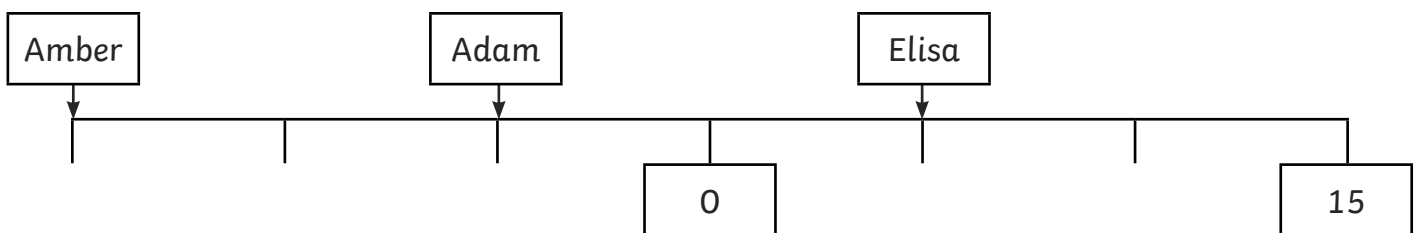
James: **-20**

Milly: **-10**

Bobby: **20**

Level 3

These players have made it to level 3 of the computer game. Find each player's score.



Amber: **-15**

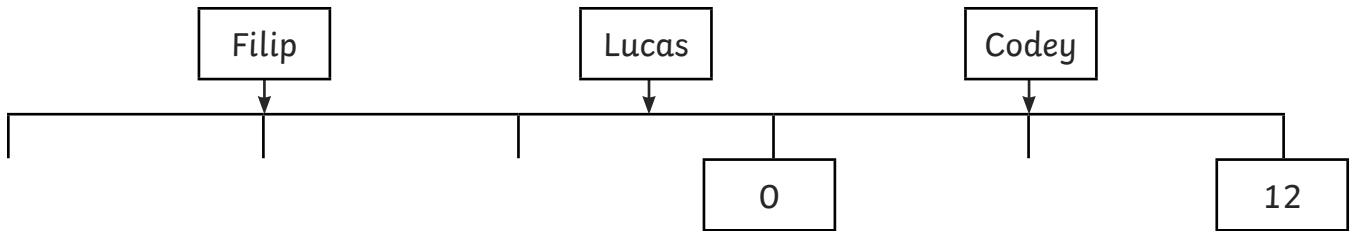
Adam: **-5**

Elisa: **5**

Computer Conundrums Answers

Level 1

These players are all at level 1 of the computer game. Can you find each player's score?



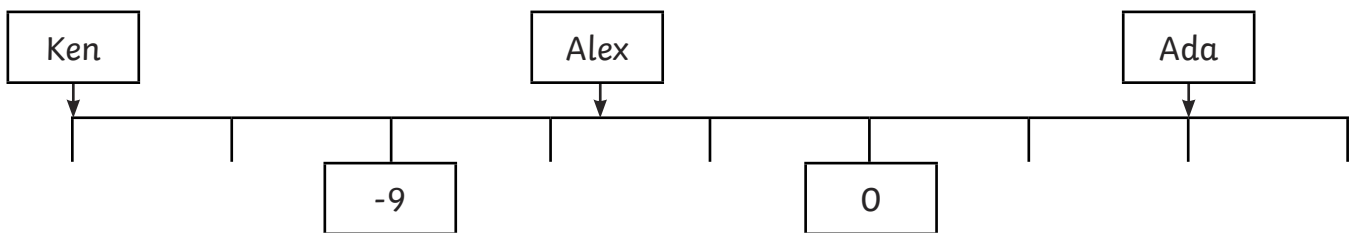
Filip: **-12**

Lucas: **-3**

Codey: **6**

Level 2

At level 2, these players' scores are shown on a different scale. Work out each player's score.



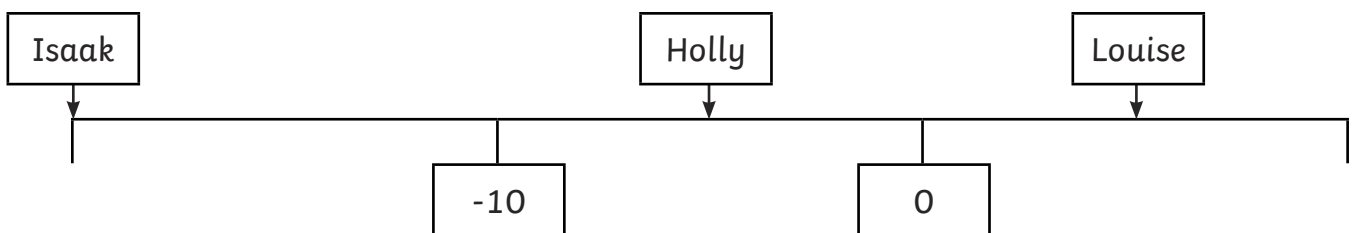
Ken: **-15**

Alex: **-5**

Ada: **6**

Level 3

These players have made it to level 3 of the computer game. Find each player's score.



Isaak: **-20**

Holly: **-5**

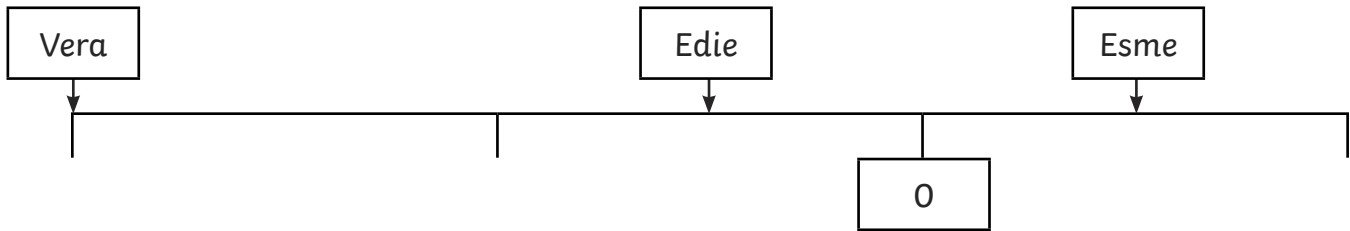
Louise: **5**

What is the difference between Louise and Holly's scores? **10**

Computer Conundrums Answers

Level 1

These players are all at level 1 of the computer game. The difference between Edie and Esme's scores is 20. Can you find each player's score?



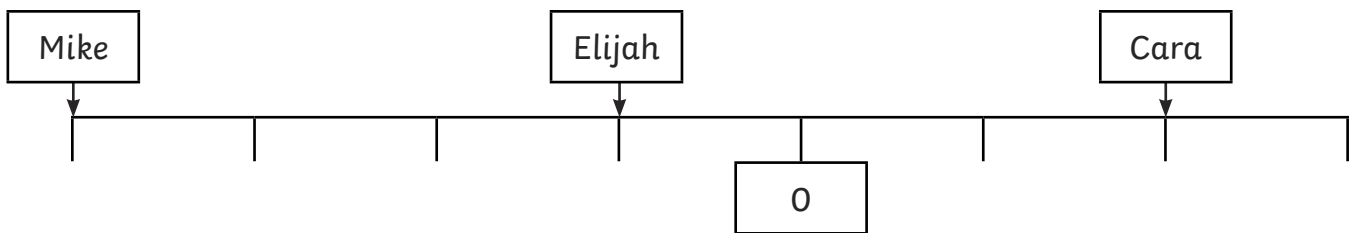
Vera: **-40**

Edie: **-10**

Esme: **10**

Level 2

At level 2, these players' scores are shown on a different scale. The difference between Mike and Cara's scores is 72. Work out each player's score.



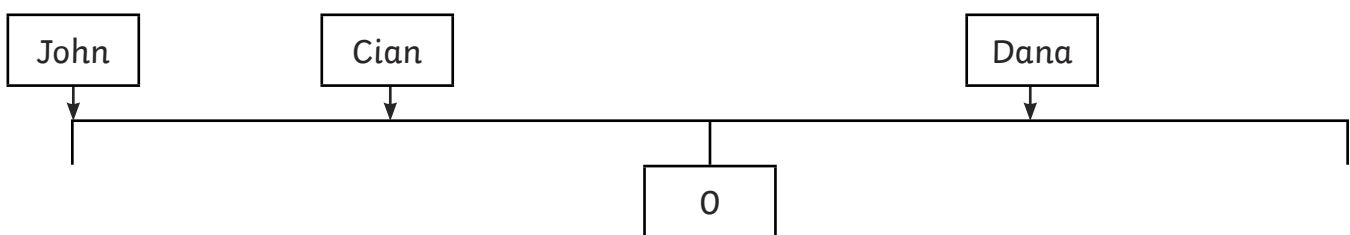
Mike: **-48**

Elijah: **-12**

Cara: **24**

Level 3

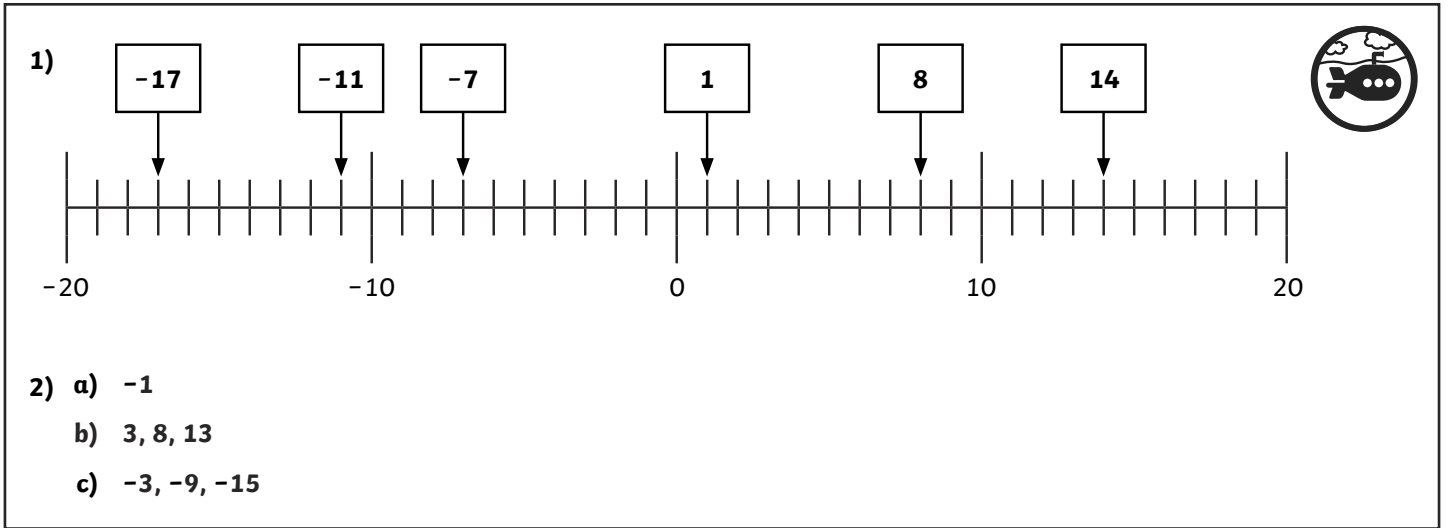
These players have made it to level 3 of the computer game. The difference between John and Dana's score is 90. Find each player's score.



John: **-60**

Cian: **-30**

Dana: **30**



1) **Catrina is wrong. If you add 5 to negative 3 you will have 2. Children might show this on a number line jotting.**

2) **Timo is incorrect because with negative numbers, as you move in steps further away from zero, the digits get bigger but in fact, the number is getting smaller. -16 is further away from zero than -5 and is therefore colder in terms of temperature.**



1) Here is one possible route through the maze.

Start at -20	Count forwards 4	Count backwards 2	Count forwards 5
Count backwards 2	Count forwards 2	Count backwards 5	Count forwards 6
Count forwards 5	Count backwards 1	Count forwards 6	Count backwards 3
Count forwards 1	Count forwards 3	Count forwards 2	Count backwards 3
Count forwards 2	Count forwards 8	Count backwards 3	Count forwards 7
Count backwards 5	Count forwards 2	Count forwards 1	Count backwards 1
Count backwards 2	Count forward 5	Finish 0	Count forwards 7

2) Many answers possible, but should meet these criteria:

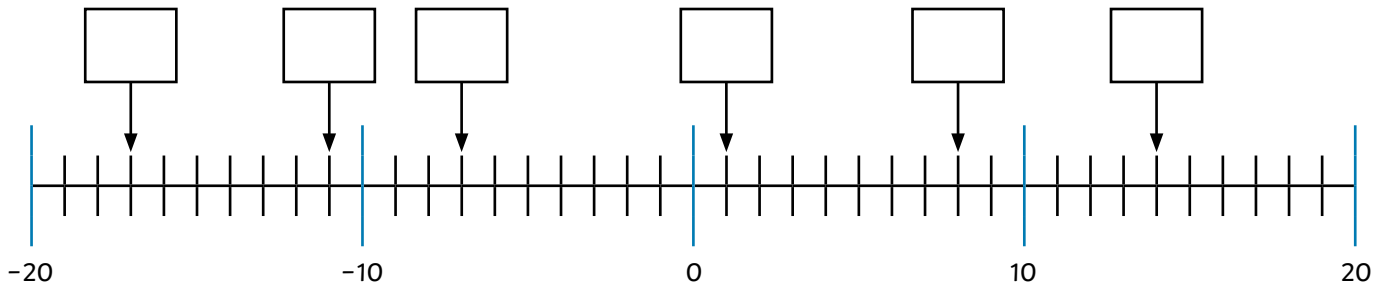
- B is negative
- $B - 6 = A$
- $B + 5 = C$
- $B + 10 = D$

A = -8	A = -11	A = -16
B = -2	B = -5	B = -10
C = 3	C = 0	C = -5
D = 8	D = 5	D = 0





- 1) What numbers are shown by the arrows?
Label the number line.



- 2) Label this number line from -20 to 20, not forgetting to include 0 between -1 and 1.



Use the number line above to help you answer the following questions.

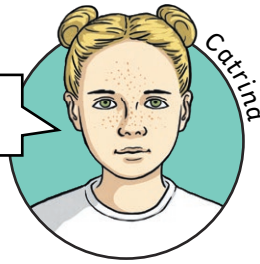
- a) If I start at 5 and count backwards in threes, what will be the first negative number I count?

- b) Starting at -12, if I count forwards in fives, what will be the first three positive numbers I count?

- c) Starting at 3, count backwards in sixes. What will be the next 3 numbers that I count?

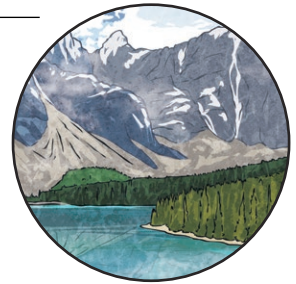
1)

If I add 5 to negative 3, I get negative 8.



Do you agree? Explain your thinking.

2) Timo is watching the weather forecast. In Canada, it is -5°C and in Norway, it is -16°C .
Timo says it is warmer in Norway than in Canada because 16 is greater than 5.
Why is Timo incorrect?

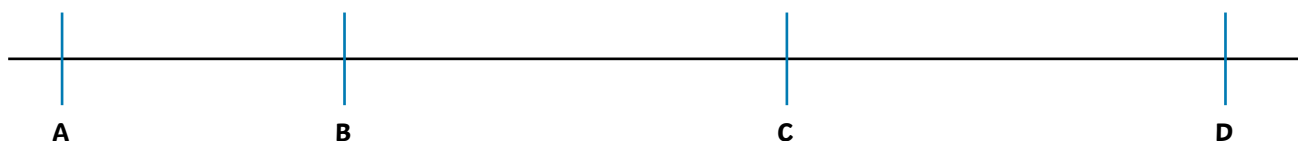




1) Starting with -20 , can you find a route through the maze, moving only left, right, up or down to finish on exactly 0 ?

Start at -20	Count forwards 4	Count backwards 2	Count forwards 5
Count backwards 2	Count forwards 2	Count backwards 5	Count forwards 6
Count forwards 5	Count backwards 1	Count forwards 6	Count backwards 3
Count forwards 1	Count forwards 3	Count forwards 2	Count backwards 3
Count forwards 2	Count forwards 8	Count backwards 3	Count forwards 7
Count backwards 5	Count forwards 2	Count forwards 1	Count backwards 1
Count backwards 2	Count forward 5	Finish 0	Count forwards 7

2) Here is a number line.



A is 6 less than B.

B is less than 0.

C is halfway between B and D.

D is 10 more than the value of B.

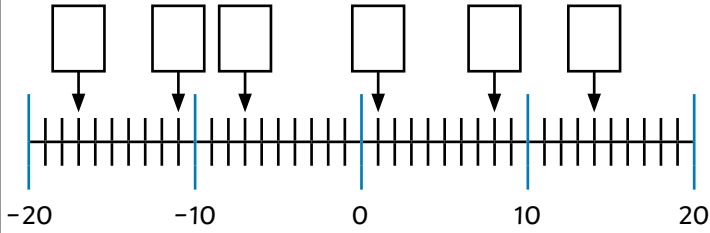
What could be the values of A, B, C and D?
Give three possible sets of numbers.

A =
B =
C =
D =

A =
B =
C =
D =

A =
B =
C =
D =

- 1) What numbers are shown by the arrows?
Label the number line.

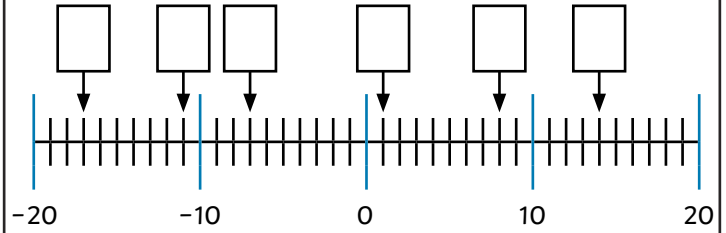


- 2) In your book, draw and label a number line from -20 to 20, not forgetting to include 0 between -1 and 1.

Use the number line you have drawn to help you answer the following questions.

- If I start at 5 and count backwards in threes, what will be the first negative number I count?
- Starting at -12, if I count forwards in fives, what will be the first three positive numbers I count?
- Starting at 3, count backwards in sixes. What will be the next 3 numbers that I count?

- 1) What numbers are shown by the arrows?
Label the number line.

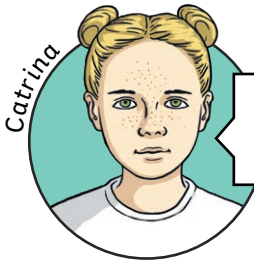


- In your book, draw and label a number line from -20 to 20, not forgetting to include 0 between -1 and 1.

Use the number line you have drawn to help you answer the following questions.

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1)



If I add 5 to negative 3, I get negative 8.

Do you agree? Explain your thinking.

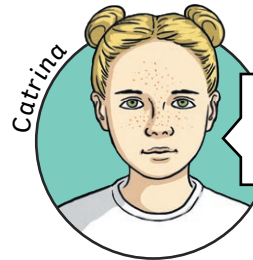
- 2) Timo is watching the weather forecast. In Canada, it is -5°C and in Norway, it is -16°C .

Timo says it is warmer in Norway than in Canada because 16 is greater than 5.

Why is Timo incorrect?



1)



If I add 5 to negative 3, I get negative 8.

Do you agree? Explain your thinking.

- 2) Timo is watching the weather forecast. In Canada, it is -5°C and in Norway, it is -16°C .

Timo says it is warmer in Norway than in Canada because 16 is greater than 5.

Why is Timo incorrect?

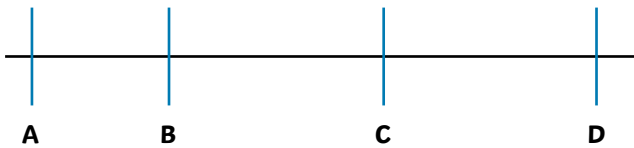


- 1) Starting with -20 , can you find a route through the maze, moving only left, right, up or down to finish on exactly 0 ?



Start at -20	Count forwards 4	Count backwards 2	Count forwards 5
Count backwards 2	Count forwards 2	Count backwards 5	Count forwards 6
Count forwards 5	Count backwards 1	Count forwards 6	Count backwards 3
Count forwards 1	Count forwards 3	Count forwards 2	Count backwards 3
Count forwards 2	Count forwards 8	Count backwards 3	Count forwards 7
Count backwards 5	Count forwards 2	Count forwards 1	Count backwards 1
Count backwards 2	Count forward 5	Finish 0	Count forwards 7

- 2) Here is a number line.



A is 6 less than B.
 B is less than O.
 C is halfway between B and D.
 D is 10 more than the value of B.

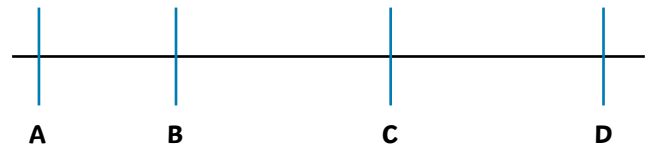
What could be the values of A, B, C and D?
 Give three possible sets of numbers.

- 1) Starting with -20 , can you find a route through the maze, moving only left, right, up or down to finish on exactly 0 ?



Start at -20	Count forwards 4	Count backwards 2	Count forwards 5
Count backwards 2	Count forwards 2	Count backwards 5	Count forwards 6
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Count forwards 2	Count forwards 8	Count backwards 3	Count forwards 7
Count backwards 5	Count forwards 2	Count forwards 1	Count backwards 1
Count backwards 2	Count forward 5	Finish 0	Count forwards 7

- 2) Here is a number line.



A is 6 less than B.
 B is less than O.
 C is halfway between B and D.
 D is 10 more than the value of B.

What could be the values of A, B, C and D?
 Give three possible sets of numbers.

-1

-2

-3

-4

-5

-6

-7

-8

-9

-10

-11

-12

-13

-14

-15

-16

-7

-18

-19

-20

-21

-22

-23

-24



-25

-26

-27

-28

-29

-30

-31

-32

-33

-34

-35

-36

-37

-38

-39

-40



Race to Zero Cards

To count forwards and backwards through zero.



Cut out these cards and use them to play the Race to Zero game.

Count backwards 1	Count backwards 2	Count forwards 1	Count forwards 2
Count backwards 3	Count backwards 4	Count forwards 3	Count forwards 4
Count backwards 5	Count backwards 6	Count forwards 5	Count forwards 6
Count backwards 7	Count backwards 8	Count forwards 7	Count forwards 8
Count backwards 9	Count backwards 10	Count forwards 9	Count forwards 10

Race to Zero Cards

To count forwards and backwards through zero.



Cut out these cards and use them to play the Race to Zero game.

Count backwards 1	Count backwards 4	Count forwards 1	Count forwards 2
Count backwards 5	Count backwards 8	Count forwards 5	Count forwards 6
Count backwards 7	Count backwards 10	Count forwards 13	Count forwards 10
Count backwards 15	Count backwards 12	Count forwards 17	Count forwards 16
Count backwards 25	Count backwards 20	Count forwards 25	Count forwards 20

Race to Zero Cards

To count forwards and backwards through zero.



Cut out these cards and use them to play the Race to Zero game.

Count backwards $-1 + 2$	Count backwards a quarter of 16	Count forwards $-6 + 7$	Count forwards 10 doubled
Count backwards a third of 15	Count backwards $\frac{1}{10}$ of 60	Count forwards $-10 + 15$	Count forwards $\frac{1}{6}$ of 36
Count backwards $-3 + 10$	Count backwards 10% of 100	Count forwards half of 26	Count forwards $-5 + 15$
Count backwards three lots of 10	Count backwards 1.2×10	Count forwards $15 + 2$	Count forwards 8 doubled
Count backwards half of 50	Count backwards double 5	Count forwards $\frac{1}{4}$ of 100	Count forwards 10% of 200