

RECALL

Guess my number

- The number has 7 digits
- The ten-thousands digit is half the ones digit.
- The hundreds digit is 3 times the million digit.
- The total of all the digits is 20

Is there more than one solution?



RECALL

12,345,678

What is 10 more than this number?

What is 100 more than this number?

What is 1000 more than this number?

What is 10,000 more than this number?

What is 100,000 more than this number?

What is 1,000,000 more than this number?

What is 10 less than this number?

What is 100 less than this number?

What is 1000 less than this number?

What is 10,000 less than this number?

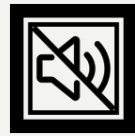
What is 100,000 less than this number?

What is 1,000,000 less than this number?

L.O. TO READ, WRITE, ORDER AND COMPARE NUMBERS UP TO 10 MILLION AND DETERMINE THE VALUE OF EACH DIGIT

- **SOME WILL EVEN:** Identify a specific number which matches given statements.
- **SOME WILL:** Identify 10/100/1000/10,000/100,000/1,000,000 more or less than.
- **MOST WILL:** Identify specific numbers on a number line.
- **ALL WILL:** Identify the place value of each digit in a number.

EXPLORE



How far away from Earth is the space probe currently?
How accurate is your answer?

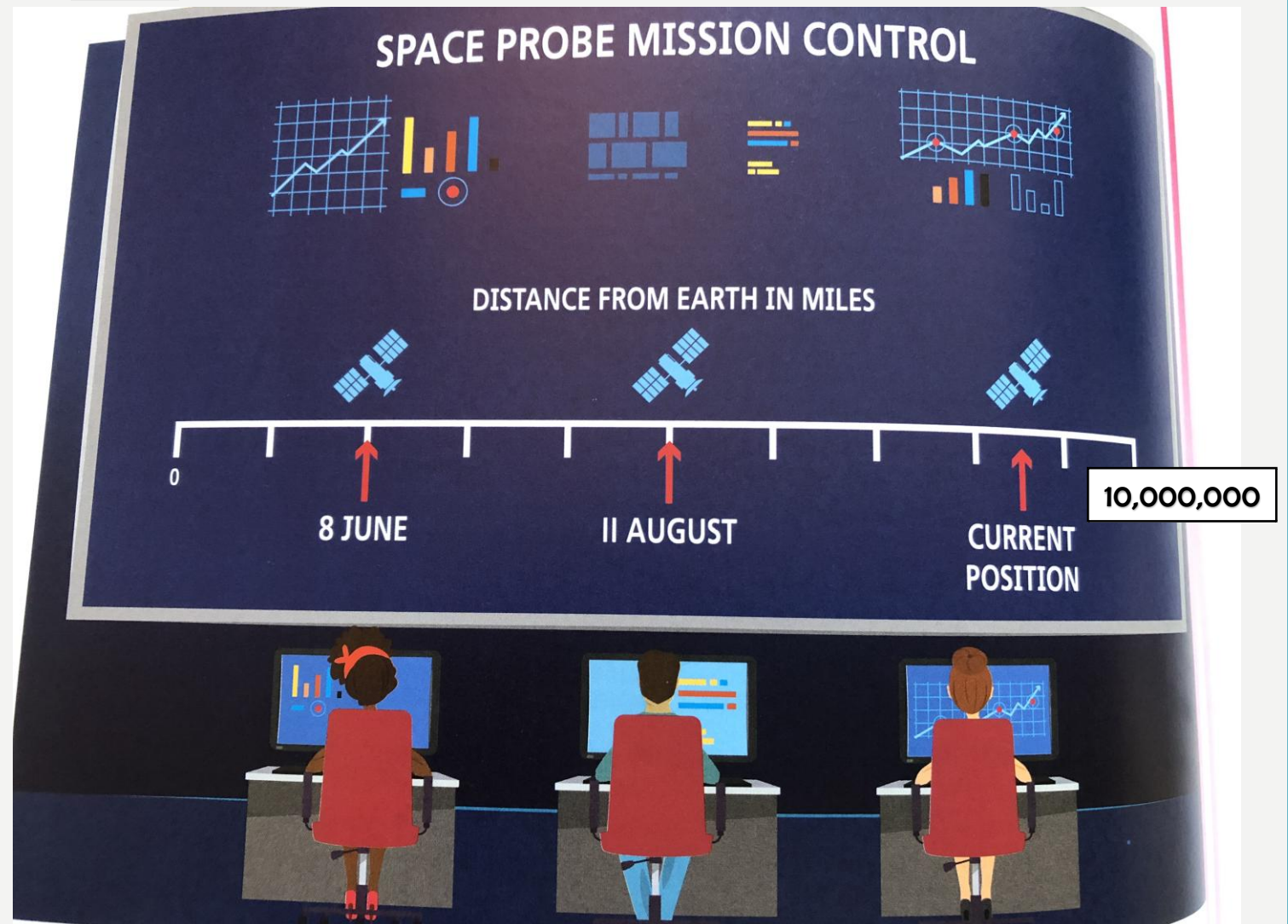
How far did the space probe travel between 8 June and 11 August?

help

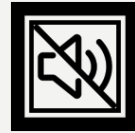


Draw the number line and label the intervals.

Estimate how far the probe travelled between the 8th June and now.



EXPLORE



How far away from Earth is the space probe currently?
How accurate is your answer?

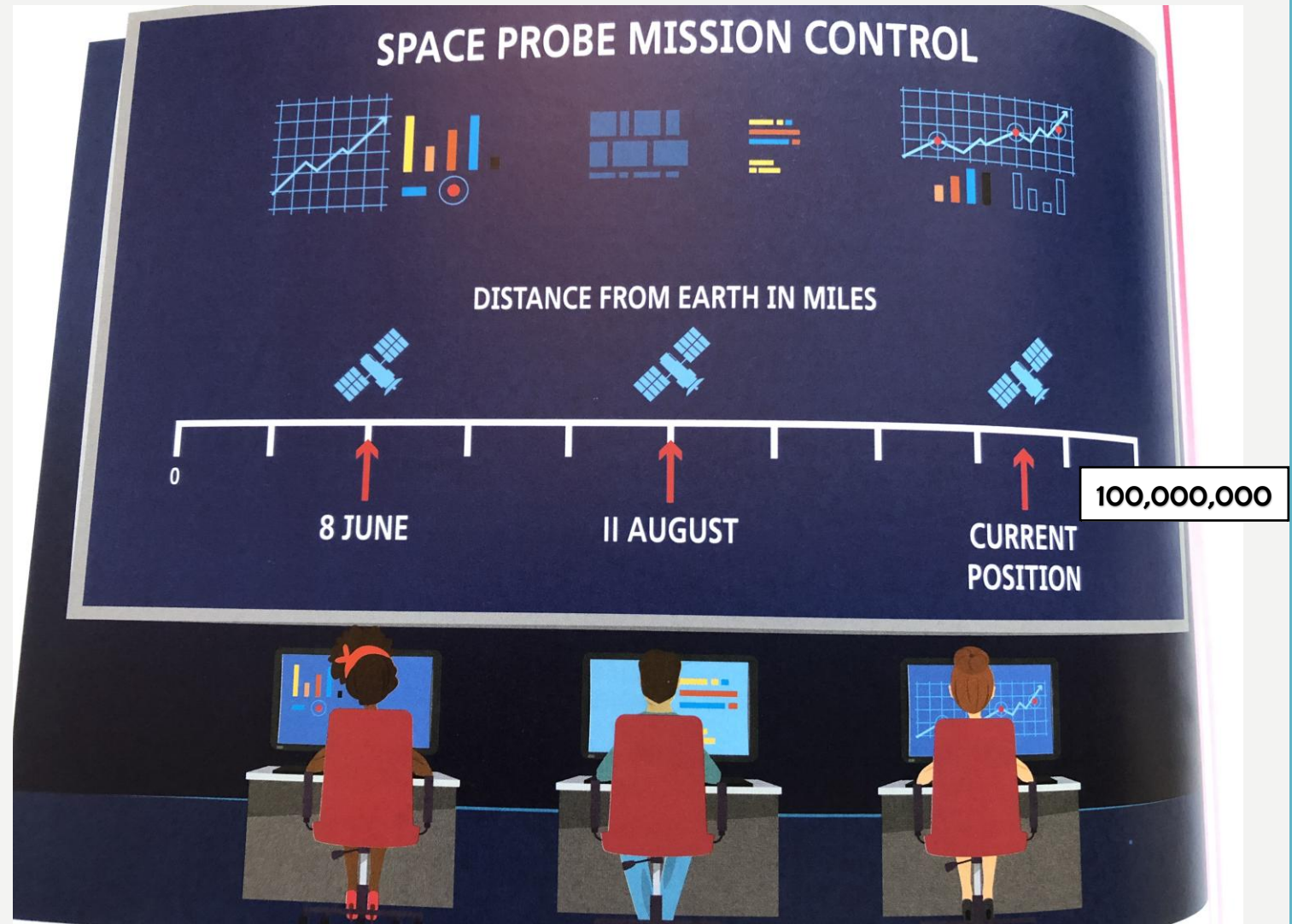
How far did the space probe travel between 8 June and 11 August?

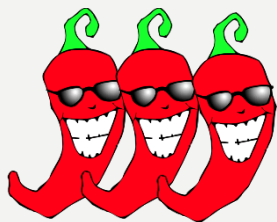
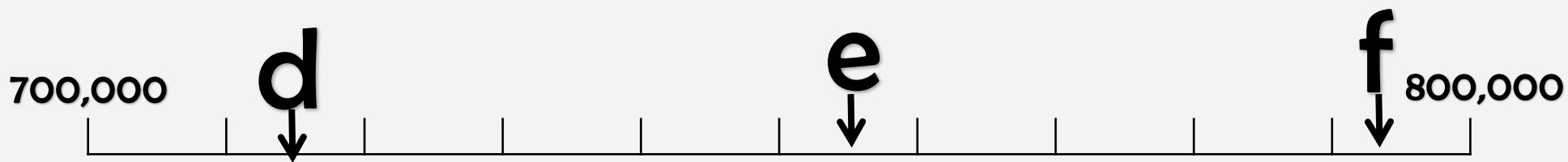
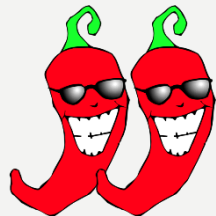
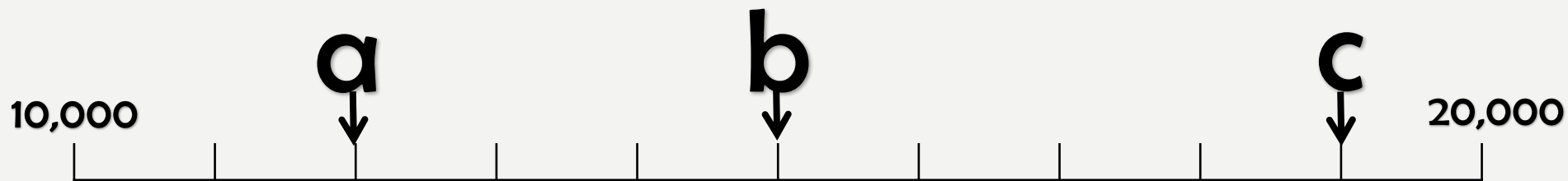
help



Draw the number line and label the intervals.

Estimate how far the probe travelled between the 8th June and now.



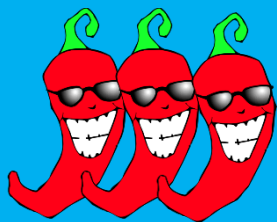
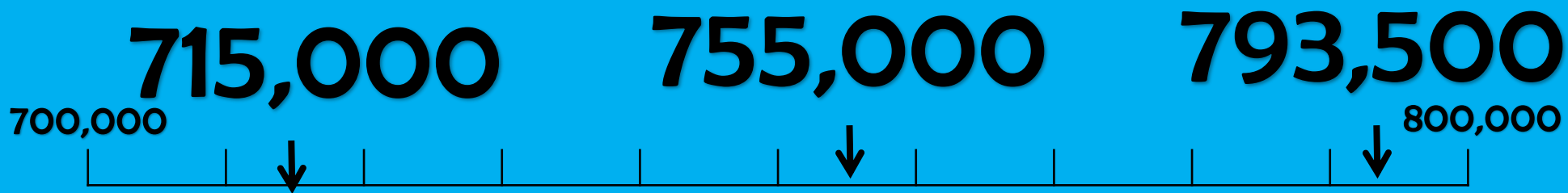
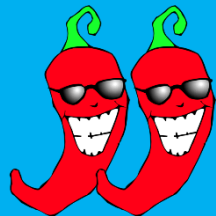
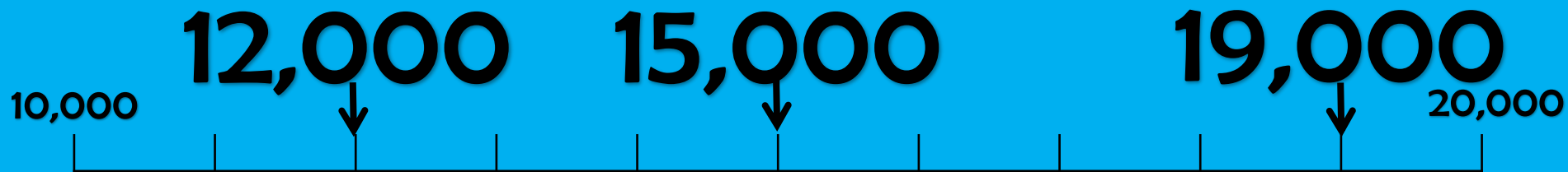


Arrow g is between _____ and _____ and could be _____.

Arrow h is between _____ and _____ and could be _____.



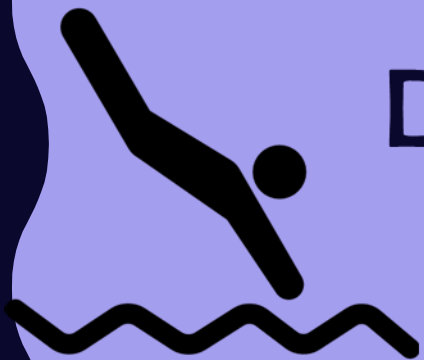
The next arrow is placed on the next interval after 1,000,000.
What number is it on?



Arrow g is between 930,000 and 940,000 and could be 933,000.
Arrow h is between 950,000 and 960,000 and could be 959,000.

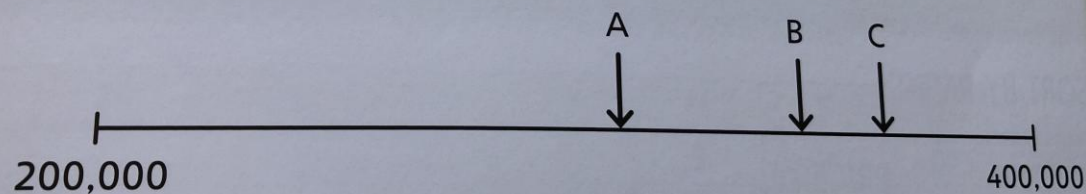


The next arrow is placed on the next interval after 1,000,000.
What number is it on?
1,010,000

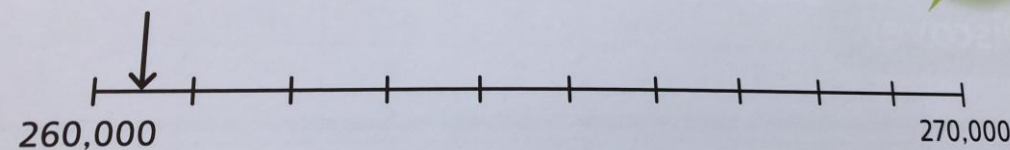


DIVE DEEPER 1

b) Estimate the position of each arrow on this number line.



a) Kate says this arrow is pointing to 265,000.



CHALLENGE

What mistake has Kate made?

Estimate the position of each arrow on this number line.

c) Where do you think 370,211 is on the number line?

I will try dividing the number line into equal parts.

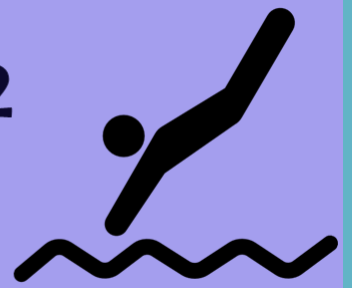


I wonder whether I can show 370,211 accurately.



Whose way is better and why?
Can you draw the number line more accurately to be able to plot the number?

DIVE DEEPER 2



d) Match the pairs of numbers in the grid below to create the target number.

3,465,326

200,320	1,405,326	3,005,306	3,265,006
460,020	3,460,026	2,060,000	5,300

e) Using the digit cards below, create three pairs of 7-digit numbers.

, 0 1 4

Your numbers must have a difference between one million and two and half million.
Each digit card can only be used once per number. The digit in the ones column must be a multiple of 3.

2 3 5 6 7 8 9



- a) Kate has assumed each interval is 10,000 rather than 1,000
- b) $A = 310,000$ $B = 360,000$ $C = 375,000$
- c) It will be between B and C but I cannot show it accurately on this number line really.

d) $200,320 + 3,265,006 = 3,465,326$

$1,405,326 + 2,060,000 = 3,465,326$

$3,005,306 + 460,020 = 3,465,326$

$3,460,026 + 5,300 = 3,465,326$

e) Various answers, for example:

$9,801,436 - 8,601,423 = 1,200,013$

$9,201,463 - 7,301,489 = 1,899,974$

$8,701,456 - 7,301,429 = 1,400,027$



Number Lines in Disguise

What does the dot on each number line represent?

Level 1

