

S.M.ART School MAB4 Group due 10-03-2022

- C1 Dan has 15 quarters. One envelope cost 75 cents. What is the greatest possible number of envelopes can he buy and how much will he get back as change?
- C2 Dan has 20 quarters. One envelope cost 75 cents. What is the greatest possible number of envelopes can he buy and how much will he get back as change?
- C3 Dan has 20 quarters. One envelope cost 45 cents. What is the greatest possible number of envelopes can he buy and how much will he get back as change?

At the class we discussed operation “distance between two points” $d(x, y)$, where points are represented by numbers on a real number line.

For example, $d(3, 8) = 5$, because if you put both points on real number line, the length of a segment connecting both points is 5.

$d(-3, 8) = 11$, because if you put both points on real number line, the length of a segment connecting both points is 11 (you have to get to 0 from -3, and then walk another 8 units to get to 8).

Compute

- D1 Is it true that $d(73, 37) = d(-73, -37)$?

D2 $d(135 - 2, -135) =$

$d(135 - 2, 135) =$

D3 $d(145, -12) =$

$d(245, 12) =$

D4 $d(-343, 231) =$

$d(119, 158) =$

D5 $d(-231, 343) =$

$d(-231, -343) =$

D6 $d(55 - 100, -55 + 100) =$

$d(55 - 107, -107 + 55) =$

D7 $d(-153, 231) =$

$d(153, 231) =$

W1 Mark has 177 coins. Andrew has 123 coins. How many Mark has to give to Andrew, so that they have the same number of coins

W2 When Kevin was born, his father was 20. Now his father is 40.
How old is Kevin now?



Find all possible values of x , so that the following statements are true

E1 $111 / x = 37$

E2 $222 / x = 37$

E3 $222 / (x - 4) = 37$

E4 $222 / (x - 4) = 74$