

7 Alex is y years old.

Her friend Brett is 3 years older.

The total of their ages is 25

How old are Alex and Brett?

Alex is Brett is

8



a) Work out the cost of one banana and one orange.

One banana costs One orange costs

b) Compare methods with a partner.

9a. Alex and Priya are solving the following algebraic equation.

$$21x - 11.5 = -1$$



Alex

This equation is impossible as the answer is a whole number.

x must be 0.5 for this equation to be balanced.



Priya

Who is correct? Prove it.



R

9b. Oscar and Kelly are solving the following algebraic equation.

$$24x - 20.4 = -2.4$$



Kelly

This equation is incorrect because 24 is larger than 20.4 so there will not be a negative answer.

x must be 0.75 for this equation to be balanced.



Oscar

Who is correct? Prove it.



R

- 1) There are six different possible values for x in this equation. Can you find them all and write the six different equations? Show your working out. One has been done for you:



$$\boxed{}x + 4 = 34 \quad 15x + 4 = 34 \text{ where } x = 2$$

- 2) What could the missing digits in this equation be? Find more than one possible answer. For example: If $x = 17$, then $3x + 13 = 64$

$$3x + \boxed{} = \boxed{}$$



The value of x in my equation is a two-digit prime number less than 30. The answer to the equation is a square number.