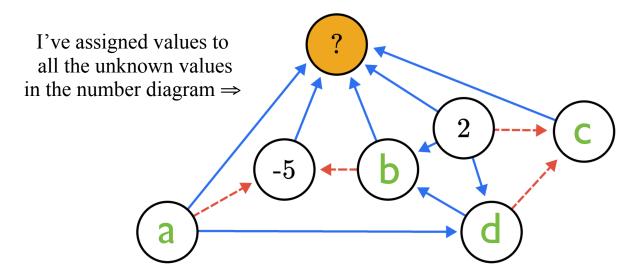
Wemi Moyela

Math Trivia Solution

What's the value of the question mark?



From the main number diagram above, we can determine the following:

$$\Rightarrow ? = (a) (-5) (b) (2) (c) = -10abc - equation (1)$$

$$\Rightarrow -5 = a + b - equation (2)$$

$$\Rightarrow b = 2 (d) = 2d - equation (3)$$

$$\Rightarrow c = 2 + d - equation (4)$$

$$\Rightarrow d = 2 (a) = 2a - equation (5)$$

Inserting equation (3) into equation (2): \Rightarrow -5 = a + (2d) = a + 2d — equation (6)

Inserting equation (5) into equation (6):

⇒
$$-5 = a + 2 (2a) = a + 4a = 5a$$

⇒ $-5 = 5a$; $-1 = a$
⇒ $a = -1$ — equation (7)

Inserting equation (7) into equation (2) and equation (5):

⇒
$$-5 = (-1) + b$$
; $b = -4$
⇒ $d = 2(-1) = -2$; $d = -2$
⇒ Since $d = -2$; $c = 2 + (-2) = 2 - 2 = 0$; $c = 0$

Therefore:

$$\Rightarrow$$
 ? = -10abc = -10 (-1) (-4) (0) = 0;
 \Rightarrow ? = 0