

Class 1 Homework

1. Tina has 12 chickens and rabbits in total (chickens have 2 legs, rabbits have 4 legs). There are 34 legs in total. How many rabbits are there?
2. David is running at a constant speed of 5 km/h. He wants to reach his 25 km goal and he has already ran for 2 hours. How many more hours does he have to run to reach his goal?
3. Simplify the following using the Distributive Property:
 - a. $7(x + 4)$
 - b. $4(4 - d)$
 - c. $5(h - 5)$

Answers:

1. If all were chickens, then there would be $12 \times 2 = 24$ chickens.

However, there are 34 legs, which means there are $34 - 24 = 10$ missing legs as a result of the rabbits legs being "removed".

Each rabbit has $4 - 2 = 2$ more legs than a chicken.

$$10 \div 2 = 5 \text{ rabbits}$$

2. Time = Distance \div Speed
Total time for 25 km = $25 \div 5 = 5$ hours
Since David has already ran for 2 hours, it will take him $5 - 2 = 3$ more hours.
3.
 - a. $7(x + 4) = 7x + 28$
 - b. $4(4 - d) = 16 - 4d$
 - c. $5(h - 5) = 5h - 25$