

Name: _____

WHOLE NUMBERS**Model Drawing: Transfer**

Question 1.

There were two bags of clips. Bag A contained 22 more clips than Bag B. After 12 clips were transferred from Bag B to Bag A, there were thrice as many clips in Bag A as in Bag B. How many clips were there in Bag A at first?

Ans: _____

Question 2.

There were some students in Class A and B. Class A had 20 more students than Class B. When 10 students left Class B to join Class A, there were 2 times as many students in Class A than in Class B. How many students did Class A have at first?

Ans: _____

Question 3.

Ahmad and Sandra had some jellybeans. Ahmad had 36 more jellybeans than Sandra. Sandra ate 12 jellybeans and gave 18 jellybeans to Ahmad. In the end, Ahmad had four times as many jellybeans as Sandra. How many jellybeans did Ahmad have at first?

Ans: _____

Question 4.

Don and Fred had some marbles. Don had 14 more marbles than Fred. After Fred lost 18 marbles and gave Don 22 of his marbles, Don now had 3 times as many marbles as Fred. How many marbles did Fred have at first?

Ans: _____

Question 5.

Janet and Carol had some ribbons. If Janet gave 29 ribbons to Carol, both would have the same number of ribbons. If Carol gave 19 ribbons to Janet, Janet would have 5 times as many ribbons as Carol. How many ribbons did Janet have at first?

Ans: _____

Question 6.

Sam had two boxes of cookies. To have equal number of cookies in each box, Sam had to transfer 27 cookies from Box A to Box B. In a rush, he transferred the 27 cookies from Box B to Box A instead. In the end, Box A had 4 times as many cookies as box B. How many cookies were there in each box at first?

Ans: _____

Question 7.

There were three bags containing some number of balls. Bag A had 16 balls more than Bag B and Bag C had the least number of balls. After 9 balls were transferred from Bag B to Bag A and 11 balls were transferred from Bag C to Bag A, Bag B now had 15 more balls than Bag C and Bag A had 4 times as many balls as Bag C. How many balls were there in each bag at first?

Ans: _____

Question 8.

Jian Ting, Devin and Siti had some number of erasers. Siti had the least number of erasers. After Jian Ting and Devin gave Siti 24 and 9 erasers respectively, each of them had the same number of erasers in the end. If Jian Ting had four times as many erasers as Siti at first, how many erasers did each of them have in the end?

Ans: _____

Question 9.

Ray, Kate and John had some number of coins and decided to play a game. John had 27 more coins than Ray. At the end of the game, Ray lost 35 coins to John and Kate lost 17 coins to John. Ray now had twice as many coins as Kate and John had four times as many coins as Ray. How many coins did each of them have at first?

Ans: J: _____ R: _____ K: _____

Question 10.

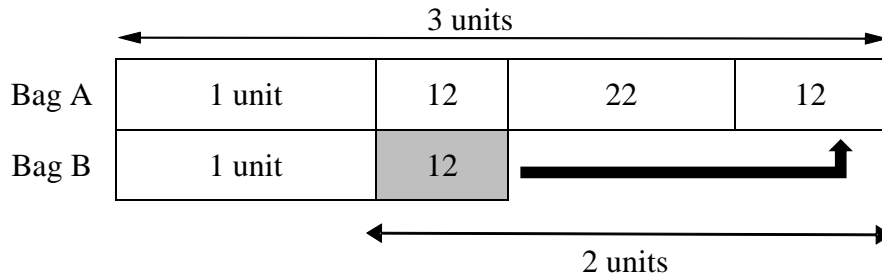
Ken, Jane and Tim shared some sweets. If Ken gave 18 sweets to Jane, both would have the same number of sweets and Jane would have 3 times as many sweets as Tim. If Jane were to give Tim 16 sweets, Jane and Tim would have equal number of sweets. How many sweets did they have altogether?

Ans: _____

WHOLE NUMBERS

Model Drawing: Transfer Solutions

Question 1.



Therefore

$$2 \text{ units} = 12 + 22 + 12$$

$$= 46$$

$$1 \text{ unit} = 46 \div 2$$

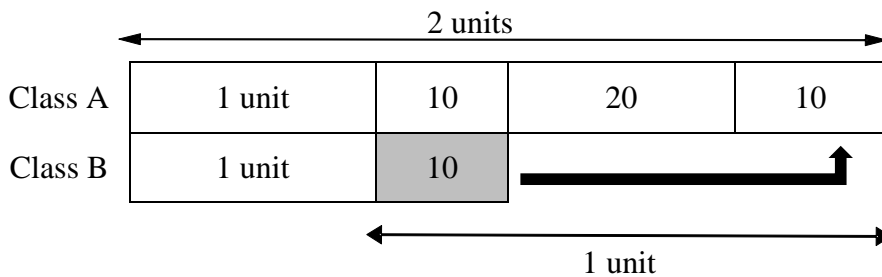
$$= 23$$

Number of clips in Bag A at first $\rightarrow 1 \text{ unit} + 12 + 22$

$$= 23 + 34$$

$$= 57 \text{ (Ans)}$$

Question 2.



Therefore

$$1 \text{ unit} = 10 + 20 + 10$$

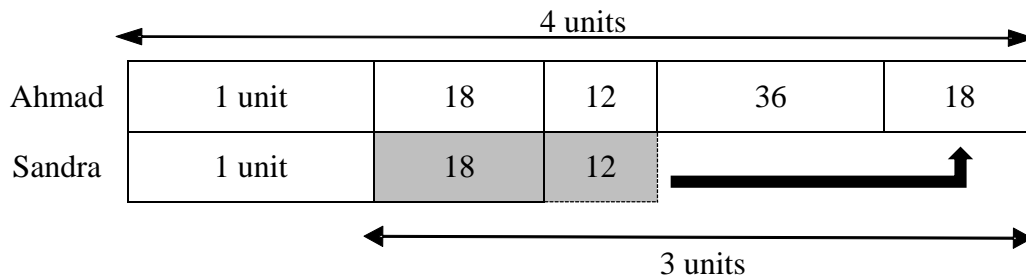
$$= 40$$

Number of students in Class A at first $\rightarrow 1 \text{ unit} + 10 + 20$

$$= 40 + 30$$

$$= 70 \text{ (Ans)}$$

Question 3.



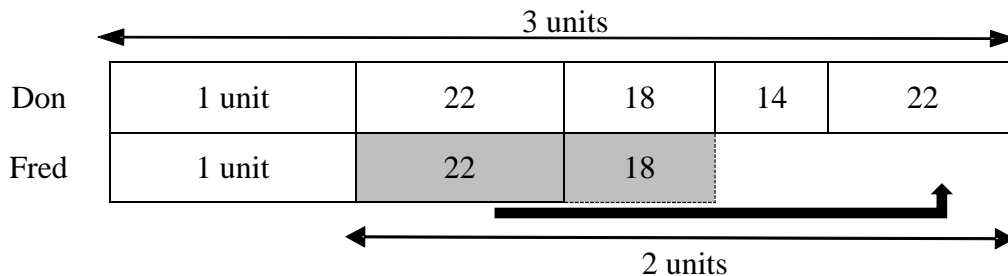
Therefore

$$\begin{aligned}
 3 \text{ units} &= 18 + 12 + 36 + 18 \\
 &= 84 \\
 1 \text{ unit} &= 84 \div 3 \\
 &= 28
 \end{aligned}$$

Number of jellybeans Ahmad had at first $\rightarrow 1 \text{ unit} + 18 + 12 + 36$

$$\begin{aligned}
 &= 28 + 66 \\
 &= 94 \text{ (Ans)}
 \end{aligned}$$

Question 4.



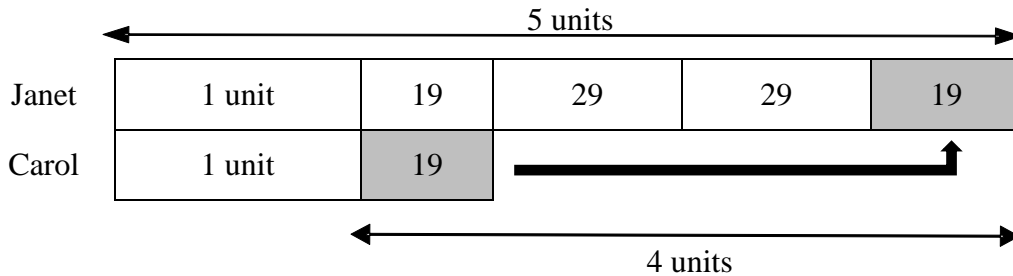
Therefore

$$\begin{aligned}
 2 \text{ units} &= 22 + 18 + 14 + 22 \\
 &= 76 \\
 1 \text{ unit} &= 76 \div 2 \\
 &= 38
 \end{aligned}$$

Number of marbles Fred had at first $\rightarrow 1 \text{ unit} + 22 + 18$

$$\begin{aligned}
 &= 38 + 40 \\
 &= 78 \text{ (Ans)}
 \end{aligned}$$

Question 5.



Therefore

$$4 \text{ units} = 19 + 29 + 29 + 19$$

$$= 96$$

$$1 \text{ unit} = 96 \div 4$$

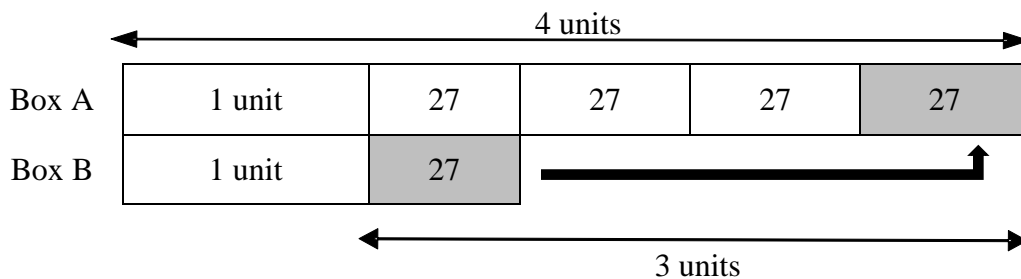
$$= 24$$

Number of ribbons Janet had at first $\rightarrow 1 \text{ unit} + 19 + 29 + 29$

$$= 24 + 77$$

$$= 101 \text{ (Ans)}$$

Question 6.



Therefore

$$3 \text{ units} = 27 + 27 + 27 + 27$$

$$= 108$$

$$1 \text{ unit} = 108 \div 3$$

$$= 36$$

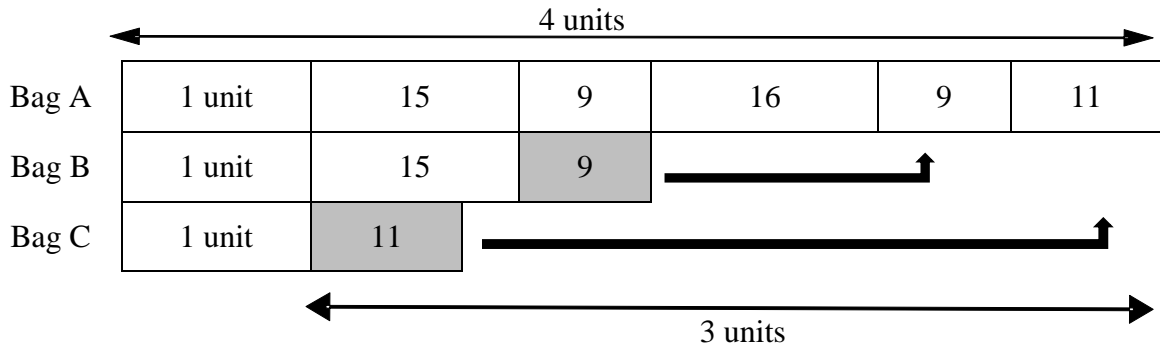
Number of cookies Box A had at first $\rightarrow 1 \text{ unit} + 27 + 27 + 27$

$$= 117 \text{ (Ans)}$$

Number of cookies Box B had at first $\rightarrow 1 \text{ unit} + 27$

$$= 63 \text{ (Ans)}$$

Question 7.



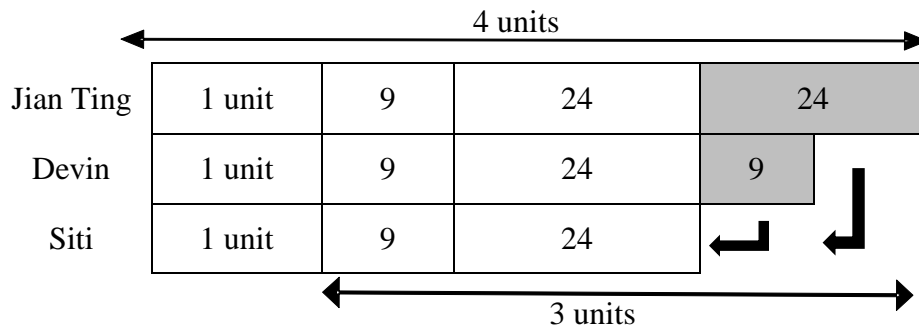
Therefore $3 \text{ units} = 15 + 9 + 16 + 9 + 11$
 $= 60$
 $1 \text{ unit} = 60 \div 3$
 $= 20$

Number of balls in Bag A at first $\rightarrow 1 \text{ unit} + 15 + 9 + 16$
 $= 20 + 40$
 $= 60 \text{ (Ans)}$

Number of balls in Bag B at first $\rightarrow 1 \text{ unit} + 15 + 9$
 $= 20 + 24$
 $= 44 \text{ (Ans)}$

Number of balls in Bag C at first $\rightarrow 1 \text{ unit} + 11$
 $= 20 + 11$
 $= 31 \text{ (Ans)}$

Question 8.



Therefore

$$3 \text{ units} = 9 + 24 + 24$$

$$= 57$$

$$1 \text{ unit} = 57 \div 3$$

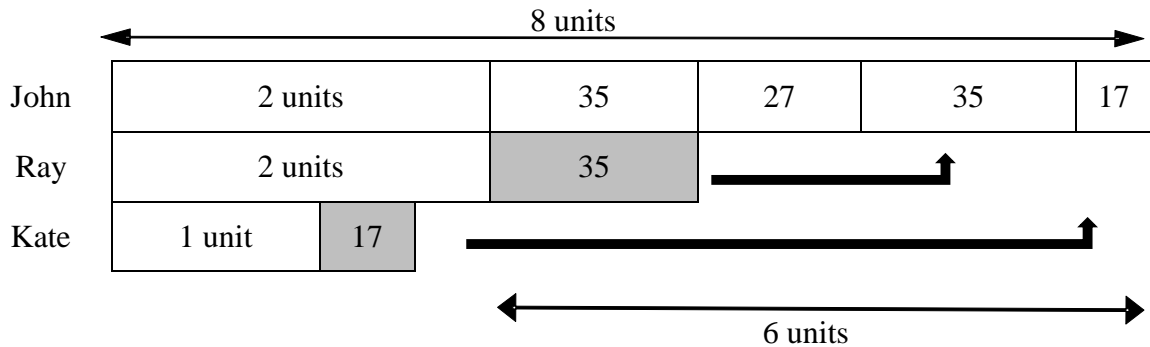
$$= 19$$

Number of erasers each of them had at the end $\rightarrow 1 \text{ unit} + 9 + 24$

$$= 19 + 9 + 24$$

$$= 52 \text{ (Ans)}$$

Question 9.



Therefore

$$6 \text{ units} = 35 + 27 + 35 + 17$$

$$= 114$$

$$1 \text{ unit} = 114 \div 6$$

$$= 19$$

Number of coins John had at first $\rightarrow 2 \text{ units} + 35 + 27$

$$= 38 + 62$$

$$= 100 \text{ (Ans)}$$

Number of coins Ray had at first $\rightarrow 2 \text{ units} + 35$

$$= 38 + 35$$

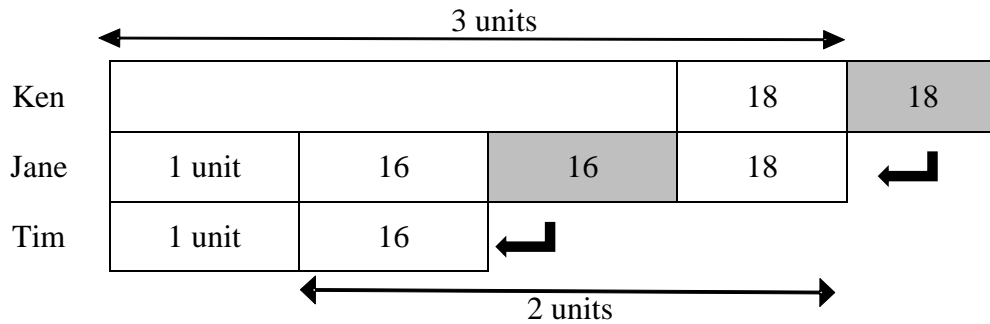
$$= 73 \text{ (Ans)}$$

Number of coins Kate had at first $\rightarrow 1 \text{ unit} + 17$

$$= 19 + 17$$

$$= 36 \text{ (Ans)}$$

Question 10.



Therefore

$$2 \text{ units} = 16 + 16 + 18$$

$$= 50$$

$$1 \text{ unit} = 50 \div 2$$

$$= 25$$

Number of sweets Ken had at first $\rightarrow 1 \text{ unit} + 16 + 16 + 18 + 18$

$$= 25 + 68$$

$$= 93$$

Number of sweets Jane had at first $\rightarrow 1 \text{ unit} + 16 + 16$

$$= 25 + 32$$

$$= 57$$

Number of sweets Tim had at first $\rightarrow 1 \text{ unit}$

$$= 25$$

Total number of sweets $\rightarrow 93 + 57 + 25$

$$= 175 \text{ (Ans)}$$