

1. Given

Taps A and B are fill the tank

Tap A take  $x$  hours more than the time both A & B.Tap B take  $y$  hours more than.A along  $x$ , B along  $y$ 

$$y = 2x - 4 \text{ (given)}$$

$$A = x, B = y$$

$$q = 2x - 4 \div 1$$

$$q = 8 \div 1$$

$$q = 8 \div 1$$

$$A = 9 \text{ hours}$$

$$B = 8 \text{ hours}$$

2. Given

father and his son have  $x$  &  $y$  coins

father gives the same 12 coins.

now son has twice than his father.

 $= 18x$  If son gives the father 12 coins father has three times greater than the son

$$= x = 18 \times 2 \text{ and } y = 12 \times 3$$

$$= 36 \text{ and } 36$$

$$\text{The son and father has } = x = 36, y = 36.$$

3. Given

$$15 \text{ apples} + 10 \text{ oranges} = ₹ 220$$

$$12 \text{ apples} + 18 \text{ oranges} = ₹ 324$$

$$3 \text{ apples} + 8 \text{ oranges} = ₹ 156$$

$$= \frac{₹ 156}{3} = ₹ 52 \text{ of 3 apples} \times$$

$$\frac{₹ 156}{3} = ₹ 52 \times 9 = ₹ 468 \text{ of 9 oranges}$$

4. Given

$$\text{A man buys 5 notebooks and 3 pens for } ₹ 190$$

$$\text{A man buys 3 notebooks and 2 pens } = ₹ 118$$

$$2 \text{ notebooks and 1 pen } = ₹ 72$$

$$= \frac{₹ 144}{2} = ₹ 72 \text{ of 2 books}$$

$$= \frac{₹ 144}{2} = ₹ 72 \text{ of 1 pen}$$

T1. Given

$$AP = BP$$

$$\angle BAD = \angle ABE$$

$$\triangle DAP \text{ and } \triangle EBP \cdot \angle DAP = \angle EBP$$

$$\angle EPA = \angle EPB$$

$$\angle APD \text{ and } \angle BPE$$

$$\angle EPA + \angle CPD = \angle DPB + \angle EPD$$

$$\angle APD = \angle EPA + \angle EPD \quad \angle BPE = \angle DPB + \angle EPD$$

$$\angle APD = \angle BPE$$

$$\angle DAP = \angle EBP \text{ Angle A.}$$

$AP = BP$  (since P is the midpoint)

$\angle APD = \angle BPE$

$\triangle DAP \cong \triangle EBP$  (CPCT)

$AD = BE$

T2 To determine if the triangles are congruent, we compare their corresponding sides.

1. side PQ corresponds to side XY. we get are given  $PQ = XY = 5\text{cm}$

2. side QR corresponds to side YZ. we get are given  $QR = YZ = 6\text{cm}$

3. side RP corresponds to side ZX. we are giving  $RP = ZX = 7\text{cm}$ .

$\triangle PQR = \triangle XYZ$

$\triangle PQR \cong \triangle XYZ$ .

T5. In

$\triangle PQR$

$PQ = QR$

L, M, N is a midpoint

PQ, QR and RP relatively

$\angle N = \angle M$  are bisect each other.

T4.