
Define variables, write two equations, solve.

Problem	Answer	Problem	Answer
1. Adult tickets cost \$12 and child tickets \$7. 50 tickets raised \$485. How many of each?		4. A boat goes 36 km downstream in 2 h and back in 3 h. Find boat and current speed.	
2. A 10% and a 30% salt solution are mixed to make 20 L of 18%. How much of each?		5. Coffee A costs \$9/kg, B \$14/kg. How much of each for 10 kg at \$11/kg?	
3. Two numbers add to 45 and differ by 11. Find them.			

Notes

Answer key — Set up and solve

#	Problem	Answer
1	Adult tickets cost \$12 and child tickets \$7. 50 tickets raised \$485. How many of each?	27 adult, 23 child
2	A 10% and a 30% salt solution are mixed to make 20 L of 18%. How much of each?	12 L of 10%, 8 L of 30%
3	Two numbers add to 45 and differ by 11. Find them.	28 and 17
4	A boat goes 36 km downstream in 2 h and back in 3 h. Find boat and current speed.	Boat 15 km/h, current 3 km/h
5	Coffee A costs \$9/kg, B \$14/kg. How much of each for 10 kg at \$11/kg?	6 kg A, 4 kg B

Notes