

Solving Equations

Practice worksheet · KS3

Name: _____

Date: _____

1. Solve $x + 3 = 8$

2. Solve $x + 9 = 15$

3. Solve $x + 6 = 14$

4. Solve $x - 4 = 10$

5. Solve $x + 12 = 20$

6. Solve $3x = 12$

7. Solve $5x = 20$

8. Solve $4x = 28$

9. Solve $7x = 42$

10. Solve $2x + 5 = 17$

11. Solve $3x + 4 = 19$

12. Solve $4x + 3 = 23$

13. Solve $5x + 2 = 37$

14. Sam solves $2x + 6 = 20$ by sharing both sides by 2 first, and gets $x + 6 = 10$, so $x = 4$. What has gone wrong, and what is x ?

stretch

15. Solve $4x - 5 = 27$, and write down which move you did first and why.

stretch

Answers

Solving equations

1. take 3 off both sides $= x = 5$
2. take 9 off both sides $= x = 6$
3. take 6 off both sides $= x = 8$
4. add 4 to both sides $= x = 14$
5. take 12 off both sides $= x = 8$
6. share both sides by 3 $= x = 4$
7. share both sides by 5 $= x = 4$
8. share both sides by 4 $= x = 7$
9. share both sides by 7 $= x = 6$
10. take 5 off both sides $\rightarrow 2x = 12$, then share both sides by 2 $= x = 6$
11. take 4 off both sides $\rightarrow 3x = 15$, then share both sides by 3 $= x = 5$
12. take 3 off both sides $\rightarrow 4x = 20$, then share both sides by 4 $= x = 5$
13. take 2 off both sides $\rightarrow 5x = 35$, then share both sides by 5 $= x = 7$
14. sharing by 2 must halve the 6 as well. Take 6 off both sides first: $2x = 14$, so $x = 7$ = he only shared pa
15. undo the subtracting first: $4x = 32$, then share both sides by 4. Sharing first would break the 5 into fraction