

Chapter Test B

For use after Chapter 3

Solve the equation.

1. $14 = x - (-7)$

2. $3 - (-x) = 19$

3. You owed \$34 to your sister. You paid
- x
- dollars back and you now owe \$12. How much did you pay back?

Tell whether the equations are equivalent.

4. $\frac{4}{5}x = 50$ and $x = 32$

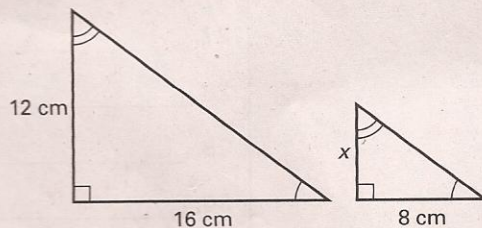
5. $\frac{2}{3}y = -48$ and $y = -72$

Solve the equation.

6. $\frac{3}{8}y = 12$

7. $-\frac{5}{7}t = -25$

8. The two triangles are similar triangles. Write and solve an equation to find the length of the side marked
- x
- .

**Solve the equation.**

9. $5x + 7 - 2x = 22$

10. $12x - (4x + 10) = 54$

11. $8x - 10(3 - x) = 42$

12. $\frac{2}{3}(x + 4) = 8$

13. The sum of three numbers is 137. The second number is 4 more than two times the first number. The third number is 5 less than three times the first number. Find the three numbers.

Solve the equation if possible.

14. $4(x - 5) = 4x - 20$

15. $6(x - 9) = -12x + 36$

16. A local gym charges nonmembers \$8 per day to use the volleyball courts. Members pay a yearly fee of \$150 and \$2 per day to use the volleyball courts. Write and solve an equation to find how many days you must use the volleyball courts to justify becoming a member.

Answers

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

11. _____

12. _____

13. _____

14. _____

15. _____

16. _____