Year 8 Mathematics
Equations Practice Test 3

Name_____

1. Solve $5a + 3 = 18$

2. Solve $5(a + 11) = 35$

3. Solve $\dfrac{b - 7}{4} = 10$

4. Solve $-2(a + 5) - 3 = 5$

5. Solve $\dfrac{2m - 3}{7} = 9$

6. Solve $\dfrac{x}{5} - 3 = 2$

7. Solve $5k + 7 = k + 19$

8. Solve $4a - 8 = 2a - 12$

9. Solve $3k - 11\ 7 = 5 - t$

10. Solve $5a + 2 = -2a + 16$

11. Solve $5(2k + 3) - 7k = 21$

12. Solve $3(m - 4) + 2m = m + 8$

13. Jack is 7 cm taller than Jill and the sum of their heights is 333 cm. How tall is Jack?

14. A rental store charges a flat fee of $150 plus $50 per day to rent truck.

    a) If d is the number of days a truck is rented, write a formula to show the cost of renting a truck.

    b) If a person is charged $850 for renting a truck, for how many days did the person rent the truck?

15. The formula to convert degrees Frahrenheit (F) to degrees Celsius (C) is
    $C = \dfrac{5}{9}(F - 32)$. Find the temperature in degrees Fahrenheit when it is 40° Celsius.

16. Solve and graph on the number line $x + 8 > -5$

17. Solve and graph on the number line $3x - 7 \le 11$

18. Solve and graph on the number line $4 - 5x > 9$

19. Solve and graph on the number line $\dfrac{3x + 2}{4} > 5$

20. Solve and graph on the number line $\dfrac{8 - 2x}{3} \leq -6$

21. Solve and graph on the number line $2 - \dfrac{4x}{7} > 10$