

Name _____
Algebra 1 – Equation Practice

Date _____

Directions: Solve and Check each equation. Be sure to box your final answers.

1. $6m = 48$

2. $-7g = -42$

3. $100j = 25$

4. $\frac{m}{2} = 8$

5. $\frac{c}{11} = 9$

6. $\frac{v}{-6} = -9$

7. $5a + 9 = 29$

8. $-5 = 3y - 14$

9. $3p - 15 = -6$

10. $\frac{t}{4} - 1 = 10$

11. $-11 + \frac{z}{5} = -7$

12. $14 = \frac{u}{4} - (-9)$

13. $2(n - 4) + 3n = 37$

14. $4z + 3(z = 2) = 34$

15. $7(k - 6) + 8 = -13$

16. $6(j - 7) + 5(2j + 3) = 37$

17. $Y - 7 - 6y = -47$

18. $2n + 3n - 7 = 13$

19. If you divide a number by 7 and take away 4, you get 4. Which equation would you use?

a. $7n - 4 = 4$

b. $\frac{n}{7} - 4 = 4$

c. $\frac{4}{7} - n = 4$

20. Five more than 4 times a number is 33. Which equation would you use?

a. $4n + 5 = 33$

b. $4n - 5 = 33$

c. $\frac{4}{n} + 5 = 33$

21. Write an equation and solve: If you multiply a number by 8 and add 12 you get 60. What is the number?

22. Three more than 7 times a number is 38. What is the number?

23. Gregorio has to make 84 cookies for scout camp. How many dozen cookies is that?

24. Zola bought 9 candy bars. She spent \$4.05. How much did each bar cost?

Solve the following questions using the chart provided!



Algebra: Equations

INSECTS For Exercises 1-3, use the table that gives the average lengths of several unusual insects in centimeters.

Insect	Length (cm)	Insect	Length (cm)
Walking stick	15	Giant water bug	6
Goliath beetle	15	Katydid	5
Giant weta	10	Silkworm moth	4
Harlequin beetle	7	Flower mantis	3

<p>1. The equation $15 - x = 12$ gives the difference in length between a walking stick and one other insect. If x is the other insect, which insect is it?</p>	<p>2. The equation $7 + y = 13$ gives the length of a Harlequin beetle and one other insect. If y is the other insect, which insect makes the equation a true sentence?</p>
<p>3. Bradley found a silkworm moth that was 2 centimeters longer than average. The equation $m - 4 = 2$ represents this situation. Find the length of the silkworm moth that Bradley found.</p>	<p>4. BUTTERFLIES A Monarch butterfly flies about 80 miles per day. So far it has flown 60 miles. In the equation $80 - m = 60$, m represents the number of miles it has yet to fly that day. Find the solution to the equation.</p>
<p>5. CICADAS The nymphs of some cicada can live among tree roots for 17 years before they develop into adults. One nymph developed into an adult after only 13 years. The equation $17 - x = 13$ describes the number of years less than 17 that it lived as a nymph. Find the value of x in the equation to tell how many years less than 17 years it lived as a nymph.</p>	<p>6. BEETLES A harlequin beetle lays eggs in trees. She can lay up to 20 eggs over 2 or 3 days. After the first day, the beetle has laid 9 eggs. If she lays 20 eggs in all, how many eggs will she lay during the second and third days?</p>