

**1-8****Practice**

Form G

**An Introduction to Equations****Tell whether each equation is true, false, or open. Explain.**

1.  $45 \div x - 14 = 22$

2.  $-42 - 10 = -52$

3.  $3(-6) + 5 = 26 - 3$

4.  $(12 + 8) \div (-10) = -12 \div 6$

5.  $-14n - 7 = 7$

6.  $7k - 8k = -15$

7.  $10 + (-15) - 5 = -5$

8.  $32 \div (-4) + 6 = -72 \div 8 + 7$

**Tell whether the given number is a solution of each equation.**

9.  $3b - 8 = 13; -7$

10.  $-4x + 7 = 15; -2$

11.  $12 = 14 - 2f; -1$

12.  $-6 = 14 - 11n; 2$

13.  $7c - (-5) = 26; 3$

14.  $25 - 10z = 15; -1$

15.  $-8a - 12 = -4; 1$

16.  $20 = \frac{1}{2}t + 25; -10$

17.  $\frac{2}{3}m + 2 = \frac{7}{3}; \frac{1}{2}$

**Write an equation for each sentence.**

18. The difference of a number and 7 is 8.

19. 6 times the sum of a number and 5 is 16.

20. A computer programmer works 40 hours per week. What is an equation that relates the number of weeks  $w$  that the programmer works and the number of hours  $h$  that the programmer spends working?21. Josie is 11 years older than Macy. What is an equation that relates the age of Josie  $J$  and the age of Macy  $M$ ?**Use mental math to find the solution of each equation.**

22.  $t - 7 = 10$

23.  $12 = 5 - h$

24.  $22 + p = 30$

25.  $6 - g = 12$

26.  $\frac{x}{4} = 3$

27.  $\frac{v}{8} = -6$

28.  $4x = 36$

29.  $12b = 60$