

1.2 Practice WITH CalcChat® AND CalcView®

In Exercises 1–12, solve the equation. Check your solution. (See Examples 1 and 2.)

► 1. $3w + 7 = 19$

2. $2g - 13 = 3$

3. $11 = 12 - q$

4. $10 = 7 - m$

5. $5 = \frac{z}{-4} - 3$

6. $\frac{a}{3} + 4 = 6$

7. $\frac{h + 6}{5} = 2$

8. $\frac{d - 8}{-2} = 12$

► 9. $12v + 10v + 14 = 80$

10. $24 = 13n - 4n + 9$

11. $3.8y + 5.6y - 2 = 2.7$

12. $\frac{7}{10}c - 8 - \frac{1}{2}c = -16$

- 7 MTR** 13. **MODELING REAL LIFE** The altitude a (in feet) of a plane t minutes after takeoff is given by $a = 3400t + 600$. How many minutes after takeoff is the plane at an altitude of 21,000 feet?

- 7 MTR** 14. **MODELING REAL LIFE** You are trying to use less water on laundry this month than you used on laundry last month. The amount of water w (in gallons) you save after x loads of laundry is given by $w(x) = 160 - 20x$. How many loads of laundry did you do this month if you saved 40 gallons of water?



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In Exercises 15–22, solve the equation. Check your solution. (See Example 3.)

15. $4(z + 5) = 32$

16. $-2(4g - 3) = 30$

► 17. $6 + 5(m + 1) = 26$

18. $5h + 2(11 - h) = -5$

19. $-15 = -6(3 + x) + 4(x - 6)$

20. $1 = 5(r + 9) - 2(1 - r)$

21. $83.8 = 8.6c - 7.3(6 - 2c)$

22. $3y - 2\frac{3}{4}(\frac{1}{2}y - 4) = -2$

NUMBER SENSE In Exercises 23–28, write and solve an equation to find the number.

23. The sum of twice a number and 13 is 75.

24. The difference of three times a number and 4 is -19.

25. Eight plus the quotient of a number and 3 is -2.

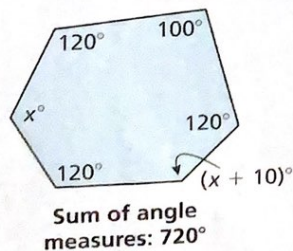
26. The sum of twice a number and half the number is 10.

27. Six times the sum of a number and 15 is -42.

28. Four times the difference of a number and 7 is 12.

USING TOOLS In Exercises 29 and 30, find the value of the variable. Then find the angle measures of the polygon. Use a protractor to check the reasonableness of your answer.

29.



30.

