Name Date

Test B

Chapter

1

Solve the equation. Justify each step.

Answers

 1.

 2.

 3.

 4.

 5.

 6.

 7.

 8.

 9.

 10.

 11.

 12.

 13.

 14.

 15.

 16.

 17.

 18.

 19.

 20.

 1.  2. 

**Solve the equation. Determine whether the equation has *one solution*,
*no solution*, or *infinitely many solutions*.**

 3.  4. 

 5.  6. 

 7.  8. 

 9.  10. 

Describe the value of *c* for which the equation is an identity.

 11.  12**. **

**Find the value of the variable. Then find the angle measures of the polygon**.

 13.  14.

 Sum of angle measures:  Sum of angle measures: 

Solve the equation.

 15.  16. 

 17.  18. 

 19.  20. 

Name Date

Test B **(continued)**

Chapter

1

 Solve the literal equation for *y*.

Answers

 21.

 22.

 23. a.

 b.

 24.

 25.

 26.

 27. a.

 b.

 21.  22. 

 23. The volume *V* of a cone is given by the formula , where *r* is
the radius of the base and *h* is the height.

 a. Solve the formula for height *h*.

 b. A cone has a volume of cubic centimeters and a radius of
6 centimeters. What is the height of the cone?

 24. A rectangular garden has a length that is five less than twice the width. The garden perimeter is 50 meters. What are the dimensions of the garden?

 25. A necklace chain costs $15. Beads cost $2.75 each. You spend a total of
$28.75 on a necklace and beads before tax. How many beads did you buy
in addition to the necklace?

 26. Consider the equation . Without calculating, how do you know
 is an extraneous solution?

 27. Your soccer team wants to buy T-shirts. You call two different companies
about prices. Each company charges a price per T-shirt and a set-up fee to
create the team logo.

 a. The total cost is the same for
each company. How many
T-shirts is the team buying?

|  |  |  |
| --- | --- | --- |
|  | Logo set-upfee | Price perT-Shirt |
| Company A | $50 | $15 |
| Company B | $95 | $12 |

 b. A few players decide not to
get T-shirts. Which company
has a lower cost?