

Chapter Test B*For use after Chapter 1***Evaluate the expression.**

1. $34.5x$ when $x = 4$

2. $\frac{1}{3}y$ when $y = \frac{9}{10}$

Evaluate the power.

3. 5^4

4. 1^7

5. $\left(\frac{1}{2}\right)^5$

6. You can convert temperatures in degrees Fahrenheit to degrees Celsius by using the expression $\frac{9}{5}C + 32$, where C is the temperature (in degrees Celsius). Convert 35°C to degrees Fahrenheit.

Evaluate the expression.

7. $16 \div (4 - 2) - 3$

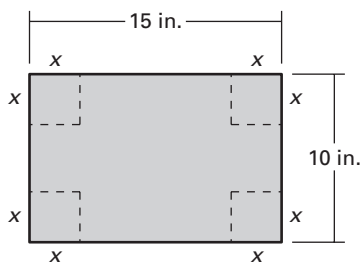
8. $3[15 - (2^3 - 6)^2]$

Evaluate the expression for the given values of the variables.

9. $3m - n$ when $m = 5$ and $n = 4$

10. $2u^2 + v$ when $u = 3$ and $v = 7$

11. A rectangular box is created by cutting out squares of equal sides of lengths x from a piece of cardboard 10 inches by 15 inches and folding up the sides as shown in the figure. The volume of the box is given by $V = x(10 - 2x)(15 - 2x)$. Find the volume of the box when the side length of the square is 3 inches.

**Write an algebraic expression, an equation, or an inequality.**

12. The quotient of the square of a number t and 14
13. Amount you earn if you make 6.5 dollars an hour for h hours
14. The product of 6 and the quantity 2 more than a number x is at least 45.
15. The sum of 4 and the quotient of a number k and 9 is 12.

Answers

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

11. _____

12. _____

13. _____

14. _____

15. _____

CHAPTER
1

Chapter Test B *continued*

For use after Chapter 1

Check whether the given number is a solution of the equation or the inequality.

16. $7z + 8 > 20$; 2

17. $\frac{r}{5} + 15 = 20$; 25

18. A carpet outlet advertises a price of \$470.40 to carpet a 12-foot by 16-foot room. If a customer was given a price of \$725.20 for carpeting a room that is 16 feet wide, what is the length of the room?

Write a rule for the function.

19.

Input, x	1	3	5	7
Output, y	2	6	10	14

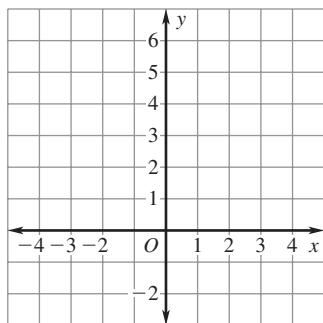
20.

Input, x	12	15	18	21
Output, y	4	5	6	7

Find the range of the function. Then graph the function.

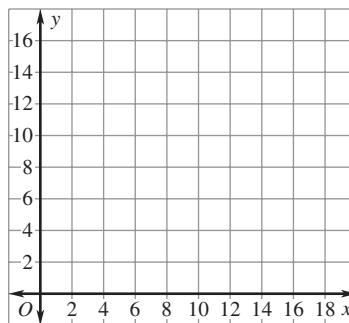
21. $y = \frac{1}{2}x + 3$

Domain: 0, 1, 2, 3, 4



22. $y = x - 6$

Domain: 10, 12, 14, 16, 18



Answers

16. _____

17. _____

18. _____

19. _____

20. _____

21. _____

See left.

22. _____

See left.

**CHAPTER
2****Quiz 1***For use after Lessons 2.1–2.3***Identify the property illustrated.**

1. $x + (-7) = -7 + x$
2. $5 + (-5) = 0$
3. $(3 + 2) + 9 = 3 + (2 + 9)$
4. $0 + 12 = 12$

Find the sum or difference.

5. $2.7 + (-5.2)$
6. $18 - (-4)$
7. $-3 - (-5)$

Evaluate the expression when $x = 10$ and $y = -3$.

8. $-x + y + 4$
9. $y + |y| - 7$
10. $6 - x - y$

Answers

1. _____

2. _____

3. _____

4. _____

5. _____
6. _____
7. _____
8. _____
9. _____
10. _____