

Quiz for Lessons 1-6 Through 1-8

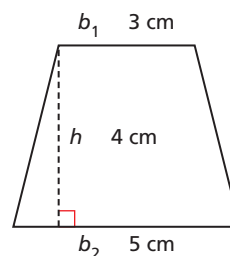
1-6 Order of Operations

Simplify each expression.

1. $-6 + 12 \div (-3)$
2. $30 - 9 + 4$
3. $(6 - 8) \cdot (7 - 5)$
4. $8 \cdot [8 - (4 - 2)]$
5. $\frac{23 - 3 \cdot 5}{4}$
6. $|3 - 9| \div 2 + 5$

Translate each word phrase into a numerical expression.

7. the quotient of 16 and the difference of 9 and -7
8. the product of 5 and the sum of 6 and 4
9. The area of a trapezoid can be found using the expression $\frac{1}{2}(b_1 + b_2)h$. Find the area of the trapezoid shown.



1-7 Simplifying Expressions

Simplify each expression.

10. $75 + 32 + 25$
11. $5 \cdot 18 \cdot 20$
12. $\frac{1}{4} \cdot 19 \cdot 8$

Write each product using the Distributive Property. Then simplify.

13. $7(67)$
14. $9(29)$
15. $17(18)$
16. $8(106)$

Simplify each expression.

17. $4k + 15k$
18. $x^2 + 22x^2$
19. $-2g + 5g$

Simplify each expression. Justify each step.

20. $3(x + 2) - 3x$
21. $x - 6x^2 + 3x + 4x^2$
22. $-2(3x + 2y + 4x - 5y)$

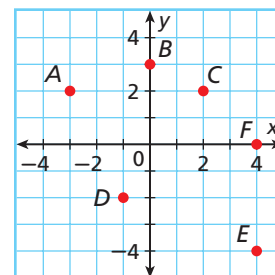
1-8 Introduction to Functions

Graph each point.

23. $A(0, -3)$
24. $B(-2, -3)$
25. $C(1, 4)$

Name the quadrant in which each point lies.

26. A
27. B
28. C
29. D
30. E
31. F



Generate ordered pairs for each function for $x = -2, -1, 0, 1,$ and 2 . Graph the ordered pairs and describe the pattern.

32. $y = x^2 + 1$
33. $y = x - 1$
34. $y = -|x|$
35. $y = 3x + 3$

36. A swimming pool contains 30,000 gallons of water. The pool is drained at a rate of 100 gallons per minute. Write a rule for the amount of water in the pool when x minutes have gone by. Find the amount of water in the pool when 30 minutes have gone by.