

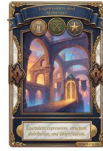
# Expressions and Structure

Equivalent expressions, structure, distribution, and simplification.

Name \_\_\_\_\_ Date \_\_\_\_\_

32 main 2-up grid 11 pages visible side quests

## Completion Reward



Shown here as a small pack artifact, not a preview destination.

### 1. In the expression $x + 5$ , what does $x$ represent?

- A. Always the number 1
- B. A multiplication symbol
- C. A value that can vary
- D. A fixed operation

### 1.1. Which expression is equivalent to $4x + 3x$ ?

- A. 7
- B.  $7x$
- C.  $12x$
- D.  $x^7$

### 1.2. Which expression is equivalent to $3(y + 2)$ ?

- A.  $3y + 2$
- B.  $y + 6$
- C.  $3y + 6$
- D.  $6y$

### 1.3. What is $2a - 5$ when $a = 7$ ?

- A. 9
- B. 14
- C. 19
- D. 2

### 1.4. Which pair are like terms?

- A.  $3x$  and 3
- B.  $5y$  and  $2y$
- C.  $4a$  and  $4b$
- D.  $x$  and  $x^2$

### 1.5. Which expression is equivalent to $5m - 2 + 4m + 7$ ?

- A.  $9m + 5$
- B.  $9m - 9$
- C.  $20m + 5$
- D.  $m + 5$

### 2. What is the coefficient in $-4x$ ?

- A. 4
- B. -4
- C.  $x$
- D.  $-x$

### 2.1. Which expression is equivalent to $4x + 3x$ ?

- A. 7
- B.  $7x$
- C.  $12x$
- D.  $x^7$

### 2.2. Which expression is equivalent to $3(y + 2)$ ?

- A.  $3y + 2$
- B.  $y + 6$
- C.  $3y + 6$
- D.  $6y$

### 2.3. What is $2a - 5$ when $a = 7$ ?

- A. 9
- B. 14
- C. 19
- D. 2

### 2.4. Which pair are like terms?

- A.  $3x$  and 3
- B.  $5y$  and  $2y$
- C.  $4a$  and  $4b$
- D.  $x$  and  $x^2$

### 2.5. Which expression is equivalent to $5m - 2 + 4m + 7$ ?

- A.  $9m + 5$
- B.  $9m - 9$
- C.  $20m + 5$
- D.  $m + 5$

### 3. What is the constant term in $3x^2 - 2x + 5$ ?

- A. 3
- B. -2
- C.  $x^2$
- D. 5

### 3.1. Which expression is equivalent to $4x + 3x$ ?

- A. 7
- B.  $7x$
- C.  $12x$
- D.  $x^7$

### 3.2. Which expression is equivalent to $3(y + 2)$ ?

- A.  $3y + 2$
- B.  $y + 6$
- C.  $3y + 6$
- D.  $6y$

### 3.3. What is $2a - 5$ when $a = 7$ ?

- A. 9
- B. 14
- C. 19
- D. 2

### 3.4. Which pair are like terms?

- A.  $3x$  and 3
- B.  $5y$  and  $2y$
- C.  $4a$  and  $4b$
- D.  $x$  and  $x^2$

### 3.5. Which expression is equivalent to $5m - 2 + 4m + 7$ ?

- A.  $9m + 5$
- B.  $9m - 9$
- C.  $20m + 5$
- D.  $m + 5$

4. What is the coefficient of  $p$  in  $-6p + 9$ ?

- A. 6
- B. 9
- C.  $p$
- D. -6

4.1. Which expression is equivalent to  $4x + 3x$ ?

- A. 7
- B.  $7x$
- C.  $12x$
- D.  $x^7$

4.2. Which expression is equivalent to  $3(y + 2)$ ?

- A.  $3y + 2$
- B.  $y + 6$
- C.  $3y + 6$
- D.  $6y$

4.3. What is  $2a - 5$  when  $a = 7$ ?

- A. 9
- B. 14
- C. 19
- D. 2

4.4. Which pair are like terms?

- A.  $3x$  and 3
- B.  $5y$  and  $2y$
- C.  $4a$  and  $4b$
- D.  $x$  and  $x^2$

4.5. Which expression is equivalent to  $5m - 2 + 4m + 7$ ?

- A.  $9m + 5$
- B.  $9m - 9$
- C.  $20m + 5$
- D.  $m + 5$

5. If  $c$  is the number of concert tickets, what does  $12c$  represent?

- A. The cost of tickets at \$12 each
- B. 12 more tickets than  $c$
- C. The ticket number 12
- D. The cost of one ticket plus  $c$

5.1. Which expression is equivalent to  $4x + 3x$ ?

- A. 7
- B.  $7x$
- C.  $12x$
- D.  $x^7$

5.2. Which expression is equivalent to  $3(y + 2)$ ?

- A.  $3y + 2$
- B.  $y + 6$
- C.  $3y + 6$
- D.  $6y$

5.3. What is  $2a - 5$  when  $a = 7$ ?

- A. 9
- B. 14
- C. 19
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5.4. Which pair are like terms?

- A.  $3x$  and 3
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- C.  $4a$  and  $4b$
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5.5. Which expression is equivalent to  $5m - 2 + 4m + 7$ ?

- A.  $9m + 5$
- B.  $9m - 9$
- C.  $20m + 5$
- D.  $m + 5$

6. Is  $3a + 2$  an expression or an equation?

- A. Equation
- B. Inequality
- C. Expression
- D. Function

6.1. Which expression is equivalent to  $4x + 3x$ ?

- A. 7
- B.  $7x$
- C.  $12x$
- D.  $x^7$

6.2. Which expression is equivalent to  $3(y + 2)$ ?

- A.  $3y + 2$
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- C.  $3y + 6$
- D.  $6y$

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- A. 9
- B. 14
- C. 19
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- B.  $5y$  and  $2y$
- C.  $4a$  and  $4b$
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6.5. Which expression is equivalent to  $5m - 2 + 4m + 7$ ?

- A.  $9m + 5$
- B.  $9m - 9$
- C.  $20m + 5$
- D.  $m + 5$

**7. Which statement is an equation?**

- A.  $3x + 5 = 17$
- B.  $3x + 5$
- C.  $4y - 2$
- D.  $8 + n$

**7.1. Which expression is equivalent to  $4x + 3x$ ?**

- A. 7
- B.  $7x$
- C.  $12x$
- D.  $x^7$

**7.2. Which expression is equivalent to  $3(y + 2)$ ?**

- A.  $3y + 2$
- B.  $y + 6$
- C.  $3y + 6$
- D.  $6y$

**7.3. What is  $2a - 5$  when  $a = 7$ ?**

- A. 9
- B. 14
- C. 19
- D. 2

**7.4. Which pair are like terms?**

- A.  $3x$  and 3
- B.  $5y$  and  $2y$
- C.  $4a$  and  $4b$
- D.  $x$  and  $x^2$

**7.5. Which expression is equivalent to  $5m - 2 + 4m + 7$ ?**

- A.  $9m + 5$
- B.  $9m - 9$
- C.  $20m + 5$
- D.  $m + 5$

**8. Which expression means five less than  $y$ ?**

- A.  $y - 5$
- B.  $5 - y$
- C.  $5y$
- D.  $y + 5$

**8.1. Which expression is equivalent to  $4x + 3x$ ?**

- A. 7
- B.  $7x$
- C.  $12x$
- D.  $x^7$

**8.2. Which expression is equivalent to  $3(y + 2)$ ?**

- A.  $3y + 2$
- B.  $y + 6$
- C.  $3y + 6$
- D.  $6y$

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- B. 14
- C. 19
- D. 2

**8.4. Which pair are like terms?**

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- B.  $5y$  and  $2y$
- C.  $4a$  and  $4b$
- D.  $x$  and  $x^2$

**8.5. Which expression is equivalent to  $5m - 2 + 4m + 7$ ?**

- A.  $9m + 5$
- B.  $9m - 9$
- C.  $20m + 5$
- D.  $m + 5$

**9. Which expression is equivalent to  $4x + 3x - 2$ ?**

- A.  $7x - 2$
- B.  $7x + 2$
- C.  $12x - 2$
- D.  $4x + x - 2$

**9.1. Which expression is equivalent to  $4x + 3x$ ?**

- A. 7
- B.  $7x$
- C.  $12x$
- D.  $x^7$

**9.2. Which expression is equivalent to  $3(y + 2)$ ?**

- A.  $3y + 2$
- B.  $y + 6$
- C.  $3y + 6$
- D.  $6y$

**9.3. What is  $2a - 5$  when  $a = 7$ ?**

- A. 9
- B. 14
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- B.  $5y$  and  $2y$
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- D.  $x$  and  $x^2$

**9.5. Which expression is equivalent to  $5m - 2 + 4m + 7$ ?**

- A.  $9m + 5$
- B.  $9m - 9$
- C.  $20m + 5$
- D.  $m + 5$

**10. A student evaluates  $4x + 1$  at  $x = 2$  and writes  $42 + 1$ . What is the mistake?**

- A. They should have added 4 and 1 first.
- B. They treated  $4x$  like the digits 4 and 2 together instead of 4 times 2.
- C. They should have squared the 2 before substituting.
- D. They should have changed  $x$  to 1 instead of 2.

**10.3. What is  $2a - 5$  when  $a = 7$ ?**

- A. 9
- B. 14
- C. 19
- D. 2

**11. A student says  $7 + 2x = 9x$ . What is the mistake?**

- A. 7 is not a like term with  $2x$ , so they cannot be combined into  $9x$ .
- B. The 7 should be multiplied by  $x$  first.
- C. You should always square the variable term.
- D. The expression should simplify to  $14x$ .

**11.3. What is  $2a - 5$  when  $a = 7$ ?**

- A. 9
- B. 14
- C. 19
- D. 2

**12. A student says  $2x + 3 = 5x$ . What is the mistake?**

- A. The answer should be  $6x$ .
- B. You should subtract  $x$  first.
- C. There is no mistake.
- D.  $2x$  and 3 are not like terms.

**12.3. What is  $2a - 5$  when  $a = 7$ ?**

- A. 9
- B. 14
- C. 19
- D. 2

**10.1. Which expression is equivalent to  $4x + 3x$ ?**

- A. 7
- B.  $7x$
- C.  $12x$
- D.  $x^7$

**10.4. Which pair are like terms?**

- A.  $3x$  and 3
- B.  $5y$  and  $2y$
- C.  $4a$  and  $4b$
- D.  $x$  and  $x^2$

**11.1. Which expression is equivalent to  $4x + 3x$ ?**

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**12.1. Which expression is equivalent to  $4x + 3x$ ?**

- A. 7
- B.  $7x$
- C.  $12x$
- D.  $x^7$

**12.4. Which pair are like terms?**

- A.  $3x$  and 3
- B.  $5y$  and  $2y$
- C.  $4a$  and  $4b$
- D.  $x$  and  $x^2$

**10.2. Which expression is equivalent to  $3(y + 2)$ ?**

- A.  $3y + 2$
- B.  $y + 6$
- C.  $3y + 6$
- D.  $6y$

**10.5. Which expression is equivalent to  $5m - 2 + 4m + 7$ ?**

- A.  $9m + 5$
- B.  $9m - 9$
- C.  $20m + 5$
- D.  $m + 5$

**11.2. Which expression is equivalent to  $3(y + 2)$ ?**

- A.  $3y + 2$
- B.  $y + 6$
- C.  $3y + 6$
- D.  $6y$

**11.5. Which expression is equivalent to  $5m - 2 + 4m + 7$ ?**

- A.  $9m + 5$
- B.  $9m - 9$
- C.  $20m + 5$
- D.  $m + 5$

**12.2. Which expression is equivalent to  $3(y + 2)$ ?**

- A.  $3y + 2$
- B.  $y + 6$
- C.  $3y + 6$
- D.  $6y$

**12.5. Which expression is equivalent to  $5m - 2 + 4m + 7$ ?**

- A.  $9m + 5$
- B.  $9m - 9$
- C.  $20m + 5$
- D.  $m + 5$

13. Evaluate  $n/2 + 7$  when  $n = 10$ . Answer with a number.

13.3. What is  $2a - 5$  when  $a = 7$ ?

- A. 9
- B. 14
- C. 19
- D. 2

14. Evaluate  $2x + 3$  when  $x = 4$ . Answer with a number.

14.3. What is  $2a - 5$  when  $a = 7$ ?

- A. 9
- B. 14
- C. 19
- D. 2

15. Expand  $3(x + 4)$ . Answer with an equivalent expression.

15.3. What is  $2a - 5$  when  $a = 7$ ?

- A. 9
- B. 14
- C. 19
- D. 2

13.1. Which expression is equivalent to  $4x + 3x$ ?

- A. 7
- B.  $7x$
- C.  $12x$
- D.  $x^7$

13.4. Which pair are like terms?

- A.  $3x$  and  $3$
- B.  $5y$  and  $2y$
- C.  $4a$  and  $4b$
- D.  $x$  and  $x^2$

14.1. Which expression is equivalent to  $4x + 3x$ ?

- A. 7
- B.  $7x$
- C.  $12x$
- D.  $x^7$

14.4. Which pair are like terms?

- A.  $3x$  and  $3$
- B.  $5y$  and  $2y$
- C.  $4a$  and  $4b$
- D.  $x$  and  $x^2$

15.1. Which expression is equivalent to  $4x + 3x$ ?

- A. 7
- B.  $7x$
- C.  $12x$
- D.  $x^7$

15.4. Which pair are like terms?

- A.  $3x$  and  $3$
- B.  $5y$  and  $2y$
- C.  $4a$  and  $4b$
- D.  $x$  and  $x^2$

13.2. Which expression is equivalent to  $3(y + 2)$ ?

- A.  $3y + 2$
- B.  $y + 6$
- C.  $3y + 6$
- D.  $6y$

13.5. Which expression is equivalent to  $5m - 2 + 4m + 7$ ?

- A.  $9m + 5$
- B.  $9m - 9$
- C.  $20m + 5$
- D.  $m + 5$

14.2. Which expression is equivalent to  $3(y + 2)$ ?

- A.  $3y + 2$
- B.  $y + 6$
- C.  $3y + 6$
- D.  $6y$

14.5. Which expression is equivalent to  $5m - 2 + 4m + 7$ ?

- A.  $9m + 5$
- B.  $9m - 9$
- C.  $20m + 5$
- D.  $m + 5$

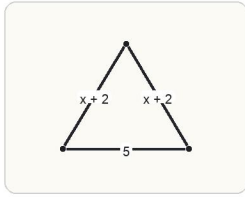
15.2. Which expression is equivalent to  $3(y + 2)$ ?

- A.  $3y + 2$
- B.  $y + 6$
- C.  $3y + 6$
- D.  $6y$

15.5. Which expression is equivalent to  $5m - 2 + 4m + 7$ ?

- A.  $9m + 5$
- B.  $9m - 9$
- C.  $20m + 5$
- D.  $m + 5$

16. Which expression gives the perimeter of the triangle?



Add the three side lengths to write the perimeter expression.

- A.  $3x + 9$
- B.  $2x + 7$
- C.  $2x + 9$
- D.  $3x + 7$

16.3. What is  $2a - 5$  when  $a = 7$ ?

- A. 9
- B. 14
- C. 19
- D. 2

17. A rectangle has length  $x + 4$  and width 3. Which expression gives its perimeter?

- A.  $x + 7$
- B.  $2x + 14$
- C.  $2x + 7$
- D.  $x + 14$

17.3. What is  $2a - 5$  when  $a = 7$ ?

- A. 9
- B. 14
- C. 19
- D. 2

18. Which expression is equivalent to  $-(x - 4)$ ?

- A.  $-x - 4$
- B.  $-x + 4$
- C.  $x - 4$
- D.  $x + 4$

18.3. What is  $2a - 5$  when  $a = 7$ ?

- A. 9
- B. 14
- C. 19
- D. 2

16.1. Which expression is equivalent to  $4x + 3x$ ?

- A. 7
- B.  $7x$
- C.  $12x$
- D.  $x^7$

16.4. Which pair are like terms?

- A.  $3x$  and 3
- B.  $5y$  and  $2y$
- C.  $4a$  and  $4b$
- D.  $x$  and  $x^2$

17.1. Which expression is equivalent to  $4x + 3x$ ?

- A. 7
- B.  $7x$
- C.  $12x$
- D.  $x^7$

17.4. Which pair are like terms?

- A.  $3x$  and 3
- B.  $5y$  and  $2y$
- C.  $4a$  and  $4b$
- D.  $x$  and  $x^2$

18.1. Which expression is equivalent to  $4x + 3x$ ?

- A. 7
- B.  $7x$
- C.  $12x$
- D.  $x^7$

18.4. Which pair are like terms?

- A.  $3x$  and 3
- B.  $5y$  and  $2y$
- C.  $4a$  and  $4b$
- D.  $x$  and  $x^2$

16.2. Which expression is equivalent to  $3(y + 2)$ ?

- A.  $3y + 2$
- B.  $y + 6$
- C.  $3y + 6$
- D.  $6y$

16.5. Which expression is equivalent to  $5m - 2 + 4m + 7$ ?

- A.  $9m + 5$
- B.  $9m - 9$
- C.  $20m + 5$
- D.  $m + 5$

17.2. Which expression is equivalent to  $3(y + 2)$ ?

- A.  $3y + 2$
- B.  $y + 6$
- C.  $3y + 6$
- D.  $6y$

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- A.  $9m + 5$
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- C.  $20m + 5$
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18.2. Which expression is equivalent to  $3(y + 2)$ ?

- A.  $3y + 2$
- B.  $y + 6$
- C.  $3y + 6$
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18.5. Which expression is equivalent to  $5m - 2 + 4m + 7$ ?

- A.  $9m + 5$
- B.  $9m - 9$
- C.  $20m + 5$
- D.  $m + 5$

19. Which expression is equivalent to  $5y + 2 - 3y + 7$ ?

- A.  $8y + 9$
- B.  $2y + 5$
- C.  $2y + 9$
- D.  $5y + 9$

19.3. What is  $2a - 5$  when  $a = 7$ ?

- A. 9
- B. 14
- C. 19
- D. 2

20. Which expression is equivalent to  $2(3x - 1) + 4$ ?

- A.  $6x - 2$
- B.  $6x + 2$
- C.  $5x + 3$
- D.  $3x + 3$

20.3. What is  $2a - 5$  when  $a = 7$ ?

- A. 9
- B. 14
- C. 19
- D. 2

21. Which expression is equivalent to  $4(a + 3) - 2a$ ?

- A.  $2a + 7$
- B.  $6a + 3$
- C.  $2a + 12$
- D.  $4a + 1$

21.3. What is  $2a - 5$  when  $a = 7$ ?

- A. 9
- B. 14
- C. 19
- D. 2

19.1. Which expression is equivalent to  $4x + 3x$ ?

- A. 7
- B.  $7x$
- C.  $12x$
- D.  $x^7$

19.4. Which pair are like terms?

- A.  $3x$  and 3
- B.  $5y$  and  $2y$
- C.  $4a$  and  $4b$
- D.  $x$  and  $x^2$

20.1. Which expression is equivalent to  $4x + 3x$ ?

- A. 7
- B.  $7x$
- C.  $12x$
- D.  $x^7$

20.4. Which pair are like terms?

- A.  $3x$  and 3
- B.  $5y$  and  $2y$
- C.  $4a$  and  $4b$
- D.  $x$  and  $x^2$

21.1. Which expression is equivalent to  $4x + 3x$ ?

- A. 7
- B.  $7x$
- C.  $12x$
- D.  $x^7$

21.4. Which pair are like terms?

- A.  $3x$  and 3
- B.  $5y$  and  $2y$
- C.  $4a$  and  $4b$
- D.  $x$  and  $x^2$

19.2. Which expression is equivalent to  $3(y + 2)$ ?

- A.  $3y + 2$
- B.  $y + 6$
- C.  $3y + 6$
- D.  $6y$

19.5. Which expression is equivalent to  $5m - 2 + 4m + 7$ ?

- A.  $9m + 5$
- B.  $9m - 9$
- C.  $20m + 5$
- D.  $m + 5$

20.2. Which expression is equivalent to  $3(y + 2)$ ?

- A.  $3y + 2$
- B.  $y + 6$
- C.  $3y + 6$
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- A.  $9m + 5$
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21.2. Which expression is equivalent to  $3(y + 2)$ ?

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- B.  $y + 6$
- C.  $3y + 6$
- D.  $6y$

21.5. Which expression is equivalent to  $5m - 2 + 4m + 7$ ?

- A.  $9m + 5$
- B.  $9m - 9$
- C.  $20m + 5$
- D.  $m + 5$

22. What is the best next step to simplify  $2(x + 5) + 3x$ ?

- A. Combine 5 and  $3x$ .
- B. Distribute the 2 to get  $2x + 10 + 3x$ .
- C. Multiply  $x$  by 5.
- D. Subtract  $3x$  from both sides.

22.3. What is  $2a - 5$  when  $a = 7$ ?

- A. 9
- B. 14
- C. 19
- D. 2

23. What is the best next step to simplify  $4x + 2x - 1$ ?

- A. Combine  $2x$  and  $-1$ .
- B. Subtract  $x$  from both sides.
- C. Multiply everything by  $x$ .
- D. Combine  $4x$  and  $2x$ .

23.3. What is  $2a - 5$  when  $a = 7$ ?

- A. 9
- B. 14
- C. 19
- D. 2

24. A student says  $-3(x - 2) = -3x - 2$ . What is wrong?

- A. Only the  $x$  should be multiplied by  $-3$ .
- B. The  $-3$  must multiply both terms, so  $-3(-2)$  becomes  $+6$ .
- C. The expression should stay in parentheses forever.
- D. The result should be  $-3x - 6$ .

24.3. What is  $2a - 5$  when  $a = 7$ ?

- A. 9
- B. 14
- C. 19
- D. 2

22.1. Which expression is equivalent to  $4x + 3x$ ?

- A. 7
- B.  $7x$
- C.  $12x$
- D.  $x^7$

22.4. Which pair are like terms?

- A.  $3x$  and 3
- B.  $5y$  and  $2y$
- C.  $4a$  and  $4b$
- D.  $x$  and  $x^2$

23.1. Which expression is equivalent to  $4x + 3x$ ?

- A. 7
- B.  $7x$
- C.  $12x$
- D.  $x^7$

23.4. Which pair are like terms?

- A.  $3x$  and 3
- B.  $5y$  and  $2y$
- C.  $4a$  and  $4b$
- D.  $x$  and  $x^2$

24.1. Which expression is equivalent to  $4x + 3x$ ?

- A. 7
- B.  $7x$
- C.  $12x$
- D.  $x^7$

24.4. Which pair are like terms?

- A.  $3x$  and 3
- B.  $5y$  and  $2y$
- C.  $4a$  and  $4b$
- D.  $x$  and  $x^2$

22.2. Which expression is equivalent to  $3(y + 2)$ ?

- A.  $3y + 2$
- B.  $y + 6$
- C.  $3y + 6$
- D.  $6y$

22.5. Which expression is equivalent to  $5m - 2 + 4m + 7$ ?

- A.  $9m + 5$
- B.  $9m - 9$
- C.  $20m + 5$
- D.  $m + 5$

23.2. Which expression is equivalent to  $3(y + 2)$ ?

- A.  $3y + 2$
- B.  $y + 6$
- C.  $3y + 6$
- D.  $6y$

23.5. Which expression is equivalent to  $5m - 2 + 4m + 7$ ?

- A.  $9m + 5$
- B.  $9m - 9$
- C.  $20m + 5$
- D.  $m + 5$

24.2. Which expression is equivalent to  $3(y + 2)$ ?

- A.  $3y + 2$
- B.  $y + 6$
- C.  $3y + 6$
- D.  $6y$

24.5. Which expression is equivalent to  $5m - 2 + 4m + 7$ ?

- A.  $9m + 5$
- B.  $9m - 9$
- C.  $20m + 5$
- D.  $m + 5$

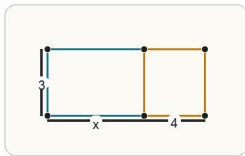
25. A student says  $x + x^2 = x^3$ . What is wrong?

- A. Addition does not combine unlike terms into a higher power
- B.  $x + x^2$  always equals 0
- C. The student should subtract instead
- D. Nothing is wrong

25.3. What is  $2a - 5$  when  $a = 7$ ?

- A. 9
- B. 14
- C. 19
- D. 2

26. A student says  $3(x + 2) = 3x + 2$ . What is wrong?



A factor outside parentheses scales every region inside.

- A. The 2 should be squared.
- B. The x should be squared.
- C. Nothing is wrong.
- D. The 3 must multiply both x and 2.

26.3. What is  $2a - 5$  when  $a = 7$ ?

- A. 9
- B. 14
- C. 19
- D. 2

27. Which expression is equivalent to  $4x + 7 - x + 3$ ?

- A.  $3x + 10$
- B.  $5x + 10$
- C.  $3x + 4$
- D.  $4x + 10$

27.3. What is  $2a - 5$  when  $a = 7$ ?

- A. 9
- B. 14
- C. 19
- D. 2

25.1. Which expression is equivalent to  $4x + 3x$ ?

- A. 7
- B.  $7x$
- C.  $12x$
- D.  $x^7$

25.4. Which pair are like terms?

- A.  $3x$  and 3
- B.  $5y$  and  $2y$
- C.  $4a$  and  $4b$
- D.  $x$  and  $x^2$

26.1. Which expression is equivalent to  $4x + 3x$ ?

- A. 7
- B.  $7x$
- C.  $12x$
- D.  $x^7$

26.4. Which pair are like terms?

- A.  $3x$  and 3
- B.  $5y$  and  $2y$
- C.  $4a$  and  $4b$
- D.  $x$  and  $x^2$

27.1. Which expression is equivalent to  $4x + 3x$ ?

- A. 7
- B.  $7x$
- C.  $12x$
- D.  $x^7$

27.4. Which pair are like terms?

- A.  $3x$  and 3
- B.  $5y$  and  $2y$
- C.  $4a$  and  $4b$
- D.  $x$  and  $x^2$

25.2. Which expression is equivalent to  $3(y + 2)$ ?

- A.  $3y + 2$
- B.  $y + 6$
- C.  $3y + 6$
- D.  $6y$

25.5. Which expression is equivalent to  $5m - 2 + 4m + 7$ ?

- A.  $9m + 5$
- B.  $9m - 9$
- C.  $20m + 5$
- D.  $m + 5$

26.2. Which expression is equivalent to  $3(y + 2)$ ?

- A.  $3y + 2$
- B.  $y + 6$
- C.  $3y + 6$
- D.  $6y$

26.5. Which expression is equivalent to  $5m - 2 + 4m + 7$ ?

- A.  $9m + 5$
- B.  $9m - 9$
- C.  $20m + 5$
- D.  $m + 5$

27.2. Which expression is equivalent to  $3(y + 2)$ ?

- A.  $3y + 2$
- B.  $y + 6$
- C.  $3y + 6$
- D.  $6y$

27.5. Which expression is equivalent to  $5m - 2 + 4m + 7$ ?

- A.  $9m + 5$
- B.  $9m - 9$
- C.  $20m + 5$
- D.  $m + 5$

28. Evaluate  $3x - 4$  when  $x = 6$ . Answer with a number.

28.1. Which expression is equivalent to  $4x + 3x$ ?

- A. 7
- B.  $7x$
- C.  $12x$
- D.  $x^7$

28.2. Which expression is equivalent to  $3(y + 2)$ ?

- A.  $3y + 2$
- B.  $y + 6$
- C.  $3y + 6$
- D.  $6y$

28.3. What is  $2a - 5$  when  $a = 7$ ?

- A. 9
- B. 14
- C. 19
- D. 2

28.4. Which pair are like terms?

- A.  $3x$  and 3
- B.  $5y$  and  $2y$
- C.  $4a$  and  $4b$
- D.  $x$  and  $x^2$

28.5. Which expression is equivalent to  $5m - 2 + 4m + 7$ ?

- A.  $9m + 5$
- B.  $9m - 9$
- C.  $20m + 5$
- D.  $m + 5$

29. Which expression is equivalent to  $9 - 2(3 - k)$ ?

- A.  $-2k + 3$
- B.  $2k - 3$
- C.  $6 - 2k$
- D.  $2k + 3$

29.1. Which expression is equivalent to  $4x + 3x$ ?

- A. 7
- B.  $7x$
- C.  $12x$
- D.  $x^7$

29.2. Which expression is equivalent to  $3(y + 2)$ ?

- A.  $3y + 2$
- B.  $y + 6$
- C.  $3y + 6$
- D.  $6y$

29.3. What is  $2a - 5$  when  $a = 7$ ?

- A. 9
- B. 14
- C. 19
- D. 2

29.4. Which pair are like terms?

- A.  $3x$  and 3
- B.  $5y$  and  $2y$
- C.  $4a$  and  $4b$
- D.  $x$  and  $x^2$

29.5. Which expression is equivalent to  $5m - 2 + 4m + 7$ ?

- A.  $9m + 5$
- B.  $9m - 9$
- C.  $20m + 5$
- D.  $m + 5$

30. Which expression is equivalent to  $8m - 3(m - 2)$ ?

- A.  $5m + 6$
- B.  $5m - 6$
- C.  $11m - 2$
- D.  $11m + 6$

30.1. Which expression is equivalent to  $4x + 3x$ ?

- A. 7
- B.  $7x$
- C.  $12x$
- D.  $x^7$

30.2. Which expression is equivalent to  $3(y + 2)$ ?

- A.  $3y + 2$
- B.  $y + 6$
- C.  $3y + 6$
- D.  $6y$

30.3. What is  $2a - 5$  when  $a = 7$ ?

- A. 9
- B. 14
- C. 19
- D. 2

30.4. Which pair are like terms?

- A.  $3x$  and 3
- B.  $5y$  and  $2y$
- C.  $4a$  and  $4b$
- D.  $x$  and  $x^2$

30.5. Which expression is equivalent to  $5m - 2 + 4m + 7$ ?

- A.  $9m + 5$
- B.  $9m - 9$
- C.  $20m + 5$
- D.  $m + 5$

**31. For  $5(x + 2) - 5x$ , which explanation is most efficient?**

- A. Distribute 5, then notice  $5x$  and  $-5x$  cancel.
- B. Combine  $x$  and  $2$  inside the parentheses first.
- C. Square the expression to remove the parentheses.
- D. Subtract  $5x$  from  $x$  before doing anything else.

31.3. What is  $2a - 5$  when  $a = 7$ ?

- A. 9
- B. 14
- C. 19
- D. 2

**32. For  $2(x + 3) + x$ , which simplified result is correct?**

- A.  $2x + 3 + x$
- B.  $2x + 3x$
- C.  $x + 6$
- D.  $3x + 6$

32.3. What is  $2a - 5$  when  $a = 7$ ?

- A. 9
- B. 14
- C. 19
- D. 2

31.1. Which expression is equivalent to  $4x + 3x$ ?

- A. 7
- B.  $7x$
- C.  $12x$
- D.  $x^7$

31.4. Which pair are like terms?

- A.  $3x$  and  $3$
- B.  $5y$  and  $2y$
- C.  $4a$  and  $4b$
- D.  $x$  and  $x^2$

32.1. Which expression is equivalent to  $4x + 3x$ ?

- A. 7
- B.  $7x$
- C.  $12x$
- D.  $x^7$

32.4. Which pair are like terms?

- A.  $3x$  and  $3$
- B.  $5y$  and  $2y$
- C.  $4a$  and  $4b$
- D.  $x$  and  $x^2$

31.2. Which expression is equivalent to  $3(y + 2)$ ?

- A.  $3y + 2$
- B.  $y + 6$
- C.  $3y + 6$
- D.  $6y$

31.5. Which expression is equivalent to  $5m - 2 + 4m + 7$ ?

- A.  $9m + 5$
- B.  $9m - 9$
- C.  $20m + 5$
- D.  $m + 5$

32.2. Which expression is equivalent to  $3(y + 2)$ ?

- A.  $3y + 2$
- B.  $y + 6$
- C.  $3y + 6$
- D.  $6y$

32.5. Which expression is equivalent to  $5m - 2 + 4m + 7$ ?

- A.  $9m + 5$
- B.  $9m - 9$
- C.  $20m + 5$
- D.  $m + 5$