# SOL Warm-Up

## **Graphing Calculator Active**

#### A.1 (i) Simplifying expressions using order of operations

- 1. Which of the following represents  $11^2 + 18 3^3 \cdot 5$  in simplified form?
- **A** 3,236 **B** 4 **C** 107
- **D** 16,996

- 2. Which of the following represents 18-(12-7)2 in simplified form ?
- **A** 2
- **B** 8
- **C** 13
- **D** 18
- 3. Which of the following represents 16-2(10-3) in simplified form ?
- **A** 2
- **B** 6
- **C** 12
- **D** 18

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A.1 (j) Simplifying expressions using order of operations

- 1. Simplify:  $10 + 5 \cdot 2^3$
- **A** 50
- **B** 140
- **C** 840
- **D** 1100

2. Simplify: 
$$6^2 - 2\left(\frac{14-5}{3}\right)^2$$

- **A** 0
- **B** 18
- **C** 204
- **D** 306
- 3. Simplify:  $24-6\cdot 2 \div 2$
- **A** 4
- **B** 10
- **C** 18
- **D** 40

### SOL Warm-Up Graphing Calculator Active

A.1 (k) Simplifying expressions

- 1. Which of the following is the simplified form of -4x + 7x?
- **A** -4
- **B** -3x
- **C** 3x
- **D** 4
- 2. Which of the following is the simplified form of 5x 4 7x + 14?
- 3. Which of the following is the simplified form of -5 + 2n 6 n?
- **A** -11 + n
- **B** -11 + 3n
- **C** 1 n
- **D** 1 + n
- 4. Which figure below models the simplification of -4x 5 + 7x + 7 using these tiles?



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#### A.1 (I) Simplifying expressions

- 1. Which of the following is the simplified form of 3 3m 5 m?
- **A** -8 4m
- **B** -8 + 4m
- C -2 + 4m
- **D** 2 4m

2. Which of the following is the simplified form of 2p - 7s - 5p + 8s?

- **A** -3p + 15s
- **B** -3p s
- C -3p + s
- **D** 3p 15s
- 3. Which of the following is the simplified form of -3 5x 5y + 8x + 7y + 8?
- **A** -3x 2y 5
- **B** 3x 2y + 5
- $C \quad 3x+2y+5 \\$
- **D** 13x + 12y + 5

4. Which of the following is the simplified form of  $\mathbf{a} + 3\mathbf{a} - 4(9 - \mathbf{a})$ ?

- **A** -36
- **B** 3a 36
- C 8a 36
- **D** 8a + 36
- 1. If a triangle has sides 3x 2, 5 x and 2x 5, what is the perimeter of the triangle?
- **A** 4x 2
- **B** 4x + 2
- **C** 5x 2
- **D** 5x 7

# SOL Warm-Up

### **Graphing Calculator Active**

A.4b (a) Simplifying expressions

- 1. Which property would justify rewriting the following expression without parentheses? 3(2x + 5y)
- A Associative property of multiplication
- **B** Distributive property
- C Addition property of zero
- **D** Commutative property of multiplication

2. Which property would justify the following statement? 8x + 4 = 4 + 8x

- A Associative property of addition
- **B** Distributive property
- C Addition property of zero
- **D** Commutative property of addition
- 3. Which property would justify the following statement? 8 + (2 + 6) = (8 + 2) + 6
- A Associative property of addition
- **B** Distributive property
- C Addition property of zero
- **D** Commutative property of addition

4. Which statement demonstrates the distributive property **incorrectly**?

- **A** 3(x + y + z) = 3x + 3y + 3z
- $\mathbf{B} \quad (\mathbf{a} + \mathbf{b}) \mathbf{c} = \mathbf{a}\mathbf{c} + \mathbf{b}\mathbf{c}$
- **C** 5(2+3x) = 10+3x
- **D** 6(3k 4) = 18k 24