

### A.REI.A.1: Identifying Properties 2

- 1 Tori computes the value of  $8 \cdot 95$  in her head by thinking  $8(100 - 5) = 8 \times 100 - 8 \times 5$ . Which number property is she using?
  - 1) associative
  - 2) distributive
  - 3) commutative
  - 4) closure
- 2 Which property of real numbers is illustrated by the equation  $-\sqrt{3} + \sqrt{3} = 0$ ?
  - 1) additive identity
  - 2) commutative property of addition
  - 3) associative property of addition
  - 4) additive inverse
- 3 The equation  $*(\Delta + \heartsuit) = *\Delta + *\heartsuit$  is an example of the
  - 1) associative law
  - 2) commutative law
  - 3) distributive law
  - 4) transitive law
- 4 If  $M$  and  $A$  represent integers,  $M + A = A + M$  is an example of which property?
  - 1) commutative
  - 2) associative
  - 3) distributive
  - 4) closure
- 5 Which property is illustrated by the equation  $\frac{3}{2}x + 0 = \frac{3}{2}x$ ?
  - 1) commutative property of addition
  - 2) distributive property
  - 3) additive inverse property
  - 4) additive identity property
- 6 Which property is illustrated by the equation  $ax + ay = a(x + y)$ ?
  - 1) associative
  - 2) commutative
  - 3) distributive
  - 4) identity
- 7 Which property is represented by the statement  $\frac{1}{2}(6a + 4b) = 3a + 2b$ ?
  - 1) commutative
  - 2) distributive
  - 3) associative
  - 4) identity
- 8 Which property is illustrated by the equation  $6 + (4 + x) = 6 + (x + 4)$ ?
  - 1) associative property of addition
  - 2) associative property of multiplication
  - 3) distributive property
  - 4) commutative property of addition

- 9 The statement  $2 + 0 = 2$  is an example of the use of which property of real numbers?
- 1) associative
  - 2) additive identity
  - 3) additive inverse
  - 4) distributive
- 10 Which property is illustrated by the equation  $4x(2x - 1) = 8x^2 - 4x$ ?
- 1) associative
  - 2) commutative
  - 3) distributive
  - 4) identity
- 11 Which property of real numbers is illustrated by the equation  $52 + (27 + 36) = (52 + 27) + 36$ ?
- 1) commutative property
  - 2) associative property
  - 3) distributive property
  - 4) identity property of addition
- 12 The equation  $3(4x) = (4x)3$  illustrates which property?
- 1) commutative
  - 2) associative
  - 3) distributive
  - 4) multiplicative inverse
- 13 The equation  $(x - 6)(8 + x) = (x - 6) \cdot (8) + (x - 6) \cdot (x)$  illustrates the use of which property?
- 1) distributive property
  - 2) associative property of addition
  - 3) associative property of multiplication
  - 4) commutative property of multiplication

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**Answer Section**

1	ANS: 2	REF: 060306a
2	ANS: 4	REF: 060413a
3	ANS: 3	REF: 080504a
4	ANS: 1	REF: 010720a
5	ANS: 4	REF: 060714a
6	ANS: 3	REF: fall0705ia
7	ANS: 2	REF: 010812a
8	ANS: 4	REF: 060827a
9	ANS: 2	REF: 080802ia
10	ANS: 3	REF: 080806a
11	ANS: 2	REF: 010924a
12	ANS: 1	REF: 081319ia
13	ANS: 1	REF: 061526ia