

Test, Form 1A

Write the letter for the correct answer in the blank at the right of each question.

For Exercises 1–3, which expression represents the phrase?

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|--|----------------|------------|------------|------------|
| 1. nine increased by two
A. $\frac{9}{2}$ | B. $9 \cdot 2$ | C. $9 + 2$ | D. $9 - 2$ | 1. _____ C |
| 2. four times a number
F. $4 \cdot 2$ | G. $4x$ | H. $4 + 2$ | J. $y + 4$ | 2. _____ G |
| 3. r decreased by 7
A. $r - 7$ | B. $7r$ | C. $r + 7$ | D. $7 - r$ | 3. _____ A |

For Exercises 4–9, what is the value of each expression?

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|---|-------|-------|-------|------------|
| 4. $2 \cdot 4 + 3$
F. 24 | G. 20 | H. 11 | J. 9 | 4. _____ H |
| 5. $6 + 8 - 2$
A. 7 | B. 10 | C. 11 | D. 12 | 5. _____ D |
| 6. $9(2 + 1) - 12$
F. 30 | G. 16 | H. 15 | J. 5 | 6. _____ H |
| 7. $a - b$, if $a = 15$ and $b = 9$
A. 6 | B. 7 | C. 24 | D. 25 | 7. _____ A |
| 8. $k + p - 16$, if $k = 12$ and $p = 8$
F. 4 | G. 8 | H. 12 | J. 16 | 8. _____ F |
| 9. $u + 4v$, if $u = 9$ and $v = 4$
A. 17 | B. 18 | C. 25 | D. 40 | 9. _____ C |

For Exercises 10 and 11, what property supports each statement?

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|---|-----------------------------|-------------|
| 10. $(5 + 3) + 7 = 5 + (3 + 7)$
F. Associative (+) | H. Commutative (+) | 10. _____ F |
| G. Identity (+) | J. Substitution | |
| 11. $4 \cdot 1 = 4$
A. Associative (\times) | C. Commutative (\times) | 11. _____ B |
| B. Identity (\times) | D. Substitution | |

For Exercises 12 and 13, which expressions are equivalent?

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|--|-------------|-------------|-------------|-------------|
| 12. $8 + (n + 7)$
F. $7n + 8$ | G. $8n + 7$ | H. $n - 1$ | J. $n + 15$ | 12. _____ J |
| 13. $9 \cdot (7 \cdot m)$
A. $16 + m$ | B. $16m$ | C. $7m + 9$ | D. $63m$ | 13. _____ D |

Test, Form 1A *(continued)*

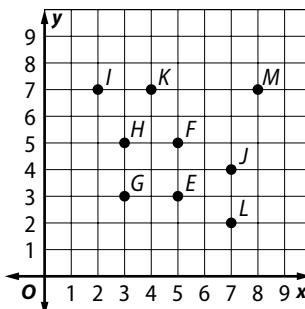
For Exercises 14 and 15, refer to the coordinate plane.

14. Choose the point for the ordered pair $(5, 3)$.

- F. H H. E
G. G J. B

15. Which ordered pair names point K ?

- A. $(2, 8)$ C. $(1, 9)$
B. $(4, 7)$ D. $(7, 4)$



16. Which relation has a domain of $\{1, 2, 5, 6\}$?

- F. $\{(2, 0), (2, 3), (2, 5), (2, 7)\}$ H. $\{(1, 3), (3, 1), (0, 5), (1, 8)\}$
G. $\{(1, 6), (2, 1), (5, 6), (6, 4)\}$ J. $\{(6, 2), (8, 3), (5, 4), (8, 5)\}$

For Exercises 17 and 18, what step in the four-step plan for problem solving relates to each of these questions?

17. Is my answer reasonable?

- A. Understand C. Solve
B. Plan D. Check

18. Is there extra information?

- F. Understand H. Solve
G. Plan J. Check

For Exercises 19–21, refer to the table.

x	12	16	20	24
y	0	4	8	12

19. Which ordered pair would appear in a graph of the data?

- A. $(0, 12)$ B. $(12, 0)$ C. $(12, 16)$ D. $(20, 12)$

19. B

20. Which rule represents the data in the table?

- F. $x - 12$ G. $12 \cdot x$ H. $12 + x$ J. $x \div 12$

20. F

21. What is the range of the data?

- A. $\{12, 16, 20, 24\}$ C. $\{0, 4, 8, 12\}$
B. $\{12\}$ D. $\{0, 12\}$

21. C

22. The sum of two consecutive odd integers is 32. What are the two integers?

- F. 0 and 32 G. 16 and 16 H. 12 and 19 J. 15 and 17

22. J