

8 Standardized Test Practice

SCORE _____

(Chapters 1–8)

Part 1: Multiple Choice

Instructions: Fill in the appropriate circle for the best answer.

- Simplify $9a^2 + 7a + 4a^2 + 2a$. (Lesson 1-3)
A $22a^3$ **B** $13a^2 + 9a$ **C** $36a^2 + 14a$ **D** $16a^2 + 6a$ **1.** Ⓐ Ⓑ Ⓒ Ⓓ
- Which is an equation for the line that passes through $(-2, 7)$ and $(3, -8)$? (Lesson 4-2)
F $y = -3x + 1$ **H** $y = -\frac{1}{3}x + 8$
G $y = -\frac{1}{3}x + \frac{19}{3}$ **J** $y = -3x + 13$ **2.** Ⓕ Ⓖ Ⓗ Ⓙ
- Solve $24 + x < 18$. (Lesson 5-1)
A $\{x \mid x < 42\}$ **C** $\left\{x \mid x < \frac{3}{4}\right\}$
B $\{x \mid x > 6\}$ **D** $\{x \mid x < -6\}$ **3.** Ⓐ Ⓑ Ⓒ Ⓓ
- Half the perimeter of a garden is 18 feet. The garden is 8 feet longer than it is wide. How wide is the garden? (Lesson 6-3)
F 5 ft **G** 40 ft² **H** 36 ft **J** 8 ft **4.** Ⓕ Ⓖ Ⓗ Ⓙ
- Find $(3.2 \times 10^5) \div (8.0 \times 10^{-4})$. (Lesson 7-4)
A 4×10^0 **C** 4×10^1
B 4×10^8 **D** 2.56×10^{10} **5.** Ⓐ Ⓑ Ⓒ Ⓓ
- Find $(3g^2 - g + 2k) + (8k - 5g^2 + 7g)$. (Lesson 8-1)
F $11g^2 - 6g + 9k$ **H** $8g^2 - 8g - 6k$
G $-6g^2 + 9g + 11k$ **J** $-2g^2 + 6g + 10k$ **6.** Ⓕ Ⓖ Ⓗ Ⓙ
- Find $(2x - 1)(3x + 2)$. (Lesson 8-3)
A $5x^2 + 4x - 2$ **C** $6x^2 - 3x + 2$
B $6x^2 + x - 2$ **D** $5x^2 + x + 1$ **7.** Ⓐ Ⓑ Ⓒ Ⓓ
- Solve $8x^2 - 6x = 0$. (Lesson 8-5)
F $\left\{0, \frac{3}{4}\right\}$ **G** $\left\{0, \frac{4}{3}\right\}$ **H** $\{6, 8\}$ **J** $\left\{0, \frac{3}{4}, 2\right\}$ **8.** Ⓕ Ⓖ Ⓗ Ⓙ
- Solve $p^2 - 10p = -21$. (Lesson 8-6)
A $\{-3, 10\}$ **B** $\{4, -7\}$ **C** $\{5\}$ **D** $\{3, 7\}$ **9.** Ⓐ Ⓑ Ⓒ Ⓓ
- Each football game begins with a kickoff. The formula $h = -16t^2 + 64t$, where h is the height in feet of the football at t seconds, can be used to model a kickoff that is in the air for 4 seconds. At what times will the football be 48 feet above the ground? (Lesson 8-7)
F 1 s **H** 1 s, 3 s
G 2 s **J** 1.5 s, 2.5 s **10.** Ⓕ Ⓖ Ⓗ Ⓙ

8 Standardized Test Practice *(continued)*

- 11.** Solve $2(v + 3) - 26 = 7(1 - v)$. (Lesson 1-2)
A 10 **B** 3 **C** 9 **D** $\frac{10}{3}$ **11.** Ⓐ Ⓑ Ⓒ Ⓓ
- 12.** Find the total price. (Lesson 2-7)
 calculator: \$90 tax: 8%
F \$90.08 **G** \$98.00 **H** \$97.20 **J** \$90.80 **12.** Ⓕ Ⓖ Ⓗ Ⓘ
- 13.** Solve $x - 2y = 6$ if the domain is $\{-2, 0, 2\}$. (Lesson 3-1)
A $\{(-2, -4), (0, -3), (2, -2)\}$ **C** $\{(-2, 5), (0, 3), (2, 5)\}$
B $\{(-2, -2), (3, 0), (2, 4)\}$ **D** $\{(2, -2), (3, 0), (4, 2)\}$ **13.** Ⓐ Ⓑ Ⓒ Ⓓ
- 14.** A line passes through $(-1, 3)$ and $(1, -3)$. Which equation does *not* represent the line? (Lesson 4-2)
F $(y - 3) = -3(x + 1)$ **H** $(y + 3) = -3(x - 1)$
G $3x - y = 0$ **J** $y = -3x$ **14.** Ⓕ Ⓖ Ⓗ Ⓘ
- 15.** Solve $\frac{n}{7} < -6$. (Lesson 5-2)
A $n > 42$ **B** $n < -42$ **C** $n < 42$ **D** $n > -42$ **15.** Ⓐ Ⓑ Ⓒ Ⓓ
- 16.** Solve $8 \leq 2h + 6 \leq 22$. (Lesson 5-4)
F $\{h \mid 1 \leq h \leq 8\}$ **H** $\{h \mid 4 \leq h \leq 11\}$
G $\{h \mid 7 \leq h \leq 14\}$ **J** $\{h \mid 0 \leq h \leq 14\}$ **16.** Ⓕ Ⓖ Ⓗ Ⓘ
- 17.** Solve $|2u + 7| = 13$. (Lesson 5-3)
A $\{-10, 3\}$ **B** $\{-10, -3\}$ **C** $\{3, 10\}$ **D** $\{-3, 10\}$ **17.** Ⓐ Ⓑ Ⓒ Ⓓ
- 18.** Factor $2x^2 + 15x + 18$. (Lesson 8-8)
F $(2x - 3)(x + 6)$ **H** $(2x - 3)(x - 6)$
G $(2x + 2)(x + 9)$ **J** $(2x + 3)(x + 6)$ **18.** Ⓕ Ⓖ Ⓗ Ⓘ

Part 2: Gridded Response

Instructions: Enter your answer by writing each digit of the answer in a column box and then shading in the appropriate circle that corresponds to that entry.

19. Solve $3(x - 2) + 4x = 3(2x - 1)$.
 (Lesson 8-2)

	⊘	⊘	⊘	
⊙	⊙	⊙	⊙	⊙
0	0	0	0	0
1	1	1	1	1
2	2	2	2	2
3	3	3	3	3
4	4	4	4	4
5	5	5	5	5
6	6	6	6	6
7	7	7	7	7
8	8	8	8	8
9	9	9	9	9

20. Solve $9x^2 + 16 = 24x$.
 (Lesson 8-9)

	⊘	⊘	⊘	
⊙	⊙	⊙	⊙	⊙
0	0	0	0	0
1	1	1	1	1
2	2	2	2	2
3	3	3	3	3
4	4	4	4	4
5	5	5	5	5
6	6	6	6	6
7	7	7	7	7
8	8	8	8	8
9	9	9	9	9