

Answer Sheet — Multiple-Choice Questions and Student-Produced Responses

You must use a No. 2 pencil. It is important that marks are dark and complete. Don't use a mechanical pencil. If you need to change a response, erase as completely as possible. Incomplete marks or erasures may affect your score.

Complete Mark

Incomplete Marks:



Section

1

**No
Calculator
Allowed**



- | | | | | | | | | | |
|----|--------------------|----|--------------------|----|--------------------|----|--------------------|----|--------------------|
| 1 | A B C D | 12 | A B C D | 23 | A B C D | 34 | A B C D | 45 | A B C D |
| 2 | A B C D | 13 | A B C D | 24 | A B C D | 35 | A B C D | 46 | A B C D |
| 3 | A B C A | 14 | A B C D | 25 | A B B D | 36 | A B C A | 47 | A B C A |
| 4 | A A C D | 15 | A B C D | 26 | A B A D | 37 | A B C A | 48 | A A C D |
| 5 | A B C D | 16 | A B C D | 27 | A A C D | 38 | A B C D | 49 | A B C D |
| 6 | A B C D | 17 | A B C A | 28 | A B C D | 39 | A B C D | 50 | A B C D |
| 7 | A B C A | 18 | A B A D | 29 | A B C D | 40 | A B C D | 51 | A B C D |
| 8 | A B A D | 19 | A A C D | 30 | A B C A | 41 | A B C D | 52 | A B C D |
| 9 | A B A D | 20 | A B C D | 31 | A B A D | 42 | A A C D | | |
| 10 | A B C A | 21 | A B C A | 32 | A A C D | 43 | A B C D | | |
| 11 | A B C D | 22 | A B C A | 33 | A A C D | 44 | A A C D | | |
- 35

52

$$\begin{array}{r} 35 \\ \times 152 \\ \hline \end{array}$$

Section

2

**No
Calculator
Allowed**



- | | | | | | | | | | |
|---|--|----|--|----|--|----|--|----|--|
| 1 | | 10 | | 19 | | 28 | | 37 | |
| 2 | | 11 | | 20 | | 29 | | 38 | |
| 3 | | 12 | | 21 | | 30 | | 39 | |
| 4 | | 13 | | 22 | | 31 | | 40 | |
| 5 | | 14 | | 23 | | 32 | | 41 | |
| 6 | | 15 | | 24 | | 33 | | 42 | |
| 7 | | 16 | | 25 | | 34 | | 43 | |
| 8 | | 17 | | 26 | | 35 | | 44 | |
| 9 | | 18 | | 27 | | 36 | | | |

33
—
42

Section

3

**No
Calculator
Allowed**



- 1 (A) (B) (C) (D)
2 (A) (B) (C) (D)
3 (A) (B) (C) (D)
4 (A) (B) (C) (D)
5 (A) (B) (C) (D)
6 (A) (B) (C) (D)
7 (A) (B) (C) (D)
8 (A) (B) (C) (D)
9 (A) (B) (C) (D)
10 (A) (B) (C) (D)
11 (A) (B) (C) (D)
12 (A) (B) (C) (D)
13 (A) (B) (C) (D)
14 (A) (B) (C) (D)
15 (A) (B) (C) (D)

Student-Produced Responses Enter answers as directed in your test book. Answers must be bubbled to be scored. You won't receive credit for anything written in the boxes.

- 16
- | | | | |
|---|---|---|---|
| 2 | 2 | 0 | 0 |
| 7 | 7 | | |
| 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 1 |
| 2 | 2 | 2 | 2 |
| 3 | 3 | 3 | 3 |
| 4 | 4 | 4 | 4 |
| 5 | 5 | 5 | 5 |
| 6 | 6 | 6 | 6 |
| 7 | 7 | 7 | 7 |
| 8 | 8 | 8 | 8 |
| 9 | 9 | 9 | 9 |

- 17
- | | | | |
|---|---|---|---|
| | | | 5 |
| | 1 | 1 | |
| • | • | • | • |
| | 0 | 0 | 0 |
| 1 | 1 | 1 | 1 |
| 2 | 2 | 2 | 2 |
| 3 | 3 | 3 | 3 |
| 4 | 4 | 4 | 4 |
| 5 | 5 | 5 | 5 |
| 6 | 6 | 6 | 6 |
| 7 | 7 | 7 | 7 |
| 8 | 8 | 8 | 8 |
| 9 | 9 | 9 | 9 |

- 18
- | | | | | |
|---|---|---|---|---|
| | | | | |
| | 1 | 1 | | |
| 2 | 0 | 0 | 0 | 0 |
| 1 | 0 | 1 | 0 | |
| 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 |

- 19
- | | | | |
|---|---|---|---|
| 2 | 5 | 0 | 0 |
| | 1 | 1 | |
| 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 |
| 1 | 1 | 1 | 1 |
| 2 | 2 | 2 | 2 |
| 3 | 3 | 3 | 3 |
| 4 | 4 | 4 | 4 |
| 5 | 5 | 5 | 5 |
| 6 | 6 | 6 | 6 |
| 7 | 7 | 7 | 7 |
| 8 | 8 | 8 | 8 |
| 9 | 9 | 9 | 9 |

- | | | | |
|---|---|---|---|
| | | | |
| 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 1 |
| 2 | 2 | 2 | 2 |
| 3 | 3 | 3 | 3 |
| 4 | 4 | 4 | 4 |
| 5 | 5 | 5 | 5 |
| 6 | 6 | 6 | 6 |
| 7 | 7 | 7 | 7 |
| 8 | 8 | 8 | 8 |
| 9 | 9 | 9 | 9 |

15/20

$$290 + 280 + 610 = 1180$$

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Complete Mark:

Incomplete Marks:



Section 4

- 1 (A) (B) (C) (D)
- 2 (A) (B) (C) (D)
- 3 (A) (B) (C) (D)
- 4 (A) (B) (C) (D)
- 5 (A) (B) (C) (D)
- 6 (A) (B) (C) (D)
- 7 (A) (B) (C) (D)
- 8 (A) (B) (C) (D)
- 9 (A) (B) (C) (D)
- 10 (A) (B) (C) (D)
- 11 (A) (B) (C) (D)
- 12 (A) (B) (C) (D)
- 13 (A) (B) (C) (D)
- 14 (A) (B) (C) (D)
- 15 (A) (B) (C) (D)
- 16 (A) (B) (C) (D)
- 17 (A) (B) (C) (D)
- 18 (A) (B) (C) (D)
- 19 (A) (B) (C) (D)
- 20 (A) (B) (C) (D)
- 21 (A) (B) (C) (D)
- 22 (A) (B) (C) (D)
- 23 (A) (B) (C) (D)
- 24 (A) (B) (C) (D)
- 25 (A) (B) (C) (D)
- 26 (A) (B) (C) (D)
- 27 (A) (B) (C) (D)
- 28 (A) (B) (C) (D)
- 29 (A) (B) (C) (D)
- 30 (A) (B) (C) (D)

Calculator Allowed



Student-Produced Responses Enter answers as directed in your test book. Answers must be bubbled to be scored. You won't receive credit for anything written in the boxes.

31

			6
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9

32

	1	4	6
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9

33

	7	5	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

34

		3	4
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9

35

	2	.	5
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9

36

			5
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9

37

	2	9	3
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9

38

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

$$27 + 15 = 42$$

$$\frac{27}{38}$$

