$\qquad$
$\qquad$
$\qquad$

## CHAPTER <br> Integers and Rational Numbers

## 2 Multiple Choice Test A

## Choose the best answer.

1. Which replacement for $x$ makes this a true statement?
$5<x$
A -6
C 4
B 0
D 9
2. Order the integers from least to greatest: $-3,4,1$.
A $-3,1,4$
B 1, -3, 4
3. Find the absolute value $|-3|$.
A -3
B 3
4. At 6 A.m. the temperature was $-8^{\circ} \mathrm{C}$. In the afternoon, the temperature was $3^{\circ} \mathrm{C}$. What was the change of temperature during the day?
A $-11^{\circ} \mathrm{C}$
C $5^{\circ} \mathrm{C}$
B $-5{ }^{\circ} \mathrm{C}$
D $11^{\circ} \mathrm{C}$
5. Evaluate $a+b$ for $a=5$ and $b=-2$.
A -5
C 2
B -3
D 3
6. Find the sum $-9+5$.
A -14
C 4
B -4
D 14
7. Evaluate $a-b$ for $a=-3$ and $b=-8$.
A -11
B 5
8. Find the difference $6-(-8)$.
A 14
B -2
9. Find the product $4 \cdot(-3)$.
A -12
C 1
B -7
D 12
10. Find the quotient $-24 \div(-8)$.
A 3
C -16
B -3
D -32
11. Simplify $(-5) \cdot(-6)$.
A -30
B 30
12. Solve $n-4=-2$.
A $n=6$
C $n=-6$
B $n=2$
D $n=-14$
13. Solve $\frac{g}{3}=-5$.
A $g=15$
C $g=-2$
B $g=-\frac{3}{5}$
D $g=-15$
14. Terri withdrew $\$ 17$ from her savings account. The current balance is $\$ 33$. How much was the balance before her withdrawal?
A $\$ 16$
B $\$ 50$
$\qquad$
$\qquad$ Class $\qquad$

## CHAPTER Integers and Rational Numbers

## 2 Multiple Choice Test A, continued

15. Solve $-9+n=15$.
A -24
C 6
B 24
D -6
16. Which decimal is equivalent to $\frac{3}{10}$ ?
A 3.333
C 0.6
B 0.7
D 0.3
17. Beth bought 25 trading cards of which 19 were sports cards. Which decimal shows what portion of the cards were sports cards?
A 0.76
B 1.316
18. Which decimal is equivalent to $\frac{7}{8}$.
A 0.625
C 0.87
B 0.875
D 0.78
19. Which group of decimals is in order from greatest to least?
A 0.37, 0.037, 0.073, 0.307
B 0.037, 0.073, 0.307, 0.37
C 0.073, 0.307, 0.37, 0.037
D 0.37, 0.307, 0.073, 0.037
20. Which number is the least?
A 0.4
C $\frac{3}{8}$
B 0.35
D $\frac{3}{5}$
21. Which number is greatest?
A $\frac{1}{4}$
C 0.26
B $\frac{2}{5}$
D 0.44
22. Which set of fractions is in order from least to greatest?
A $\frac{1}{3}, \frac{2}{4}, \frac{3}{5}$
B $\frac{3}{5}, \frac{2}{4}, \frac{1}{3}$
$\qquad$
$\qquad$
$\qquad$

## CHAPTER Integers and Rational Numbers

## 2 Multiple Choice Test B

## Choose the best answer.

1. Which makes the statement, $-7>\square$, true?
A -8
C 0
B -2
D 6
2. Order the integers from least to greatest: 4, $-3,0,8,-5$.
F $8,4,0,-3,-5$
G $-3,-5,0,4,8$
H $-5,-3,0,4,8$
J $0,-3,4,-5,8$
3. Find the absolute value $|-8|$.
A -8
C 0
B -2
D 8
4. At 6 A.m. the temperature was $-5^{\circ} \mathrm{C}$. In the afternoon, the temperature was $10^{\circ} \mathrm{C}$. What was the change of temperature during the day?
F $-15^{\circ} \mathrm{C}$
H $\quad 10{ }^{\circ} \mathrm{C}$
G $-5^{\circ} \mathrm{C}$
J $15^{\circ} \mathrm{C}$
5. Evaluate $a+b$ for $a=-9$ and $b=6$.
A -15
C 3
B -3
D 15
6. Add $24+(-18)$.

| $F-42$ | H | 6 |
| :--- | :--- | :--- |
| $G-6$ | J | 42 |

7. Find the difference $-16-(-22)$.
A -38
C 6
B -6
D 38
8. Find the difference $5-(-13)$.
F -18
H 8
G -8
J 18
9. Find the product $5 \cdot(-10)$.
A -50
C 2
B -5
D 50
10. Find the quotient $-200 \div(-40)$.
F -240
H 5
G -5
J 8,000
11. Simplify $-11(5)$.
A -55
C -5
B -25
D 25
12. Solve $n-9=-5$.
F $n=-14$
H $n=4$
G $n=-4$
J $n=14$
13. Solve $\frac{g}{4}=-16$.
A $g=-64$
C $g=4$
B $g=-4$
D $g=64$
14. Marilyn withdrew $\$ 43$ from her savings account. The current balance is $\$ 87$. How much was the balance before her withdrawal?
F - $\$ 44$
H \$87
G \$44
J \$130
15. Solve $-8+x=12$.
A 20
C -20
B 4
D -4
$\qquad$
$\qquad$
$\qquad$

## CHAPTER Integers and Rational Numbers

## 2 Multiple Choice Test B, continued

16. Which decimal is equivalent to $\frac{7}{8}$ ?
F 0.625
H 0.78
G 0.7
J 0.875
17. Richard bought 48 trading cards, of which 21 were sports cards. Which decimal shows what portion of the cards were sports cards?
A 0.21
C 0.4375
B 0.41
D 2.29
18. Which decimal is equivalent to $\frac{3}{8}$ ?
F 0.83
H 0.38
G 0.375
J 0.625
19. Which group of decimals is in order from greatest to least?
A 0.054, 0.405, 0.45, 0.504
B $0.504,0.054,0.45,0.405$
C $0.405,0.045,0.054,0.504$
D $0.504,0.45,0.405,0.054$
20. Which number is the least?
F 0.41
H $\frac{1}{8}$
G 0.124
J $\frac{2}{5}$
21. Which number is greatest?
A $\frac{3}{4}$
C 0.68
B $\frac{7}{10}$
D 0.77
22. Which set of fractions is in order from least to greatest?
F $\frac{2}{3}, \frac{5}{6}, \frac{3}{4}$
H $\frac{2}{3}, \frac{3}{4}, \frac{5}{6}$
G $\frac{5}{6}, \frac{3}{4}, \frac{2}{3}$
J $\frac{3}{4}, \frac{2}{3}, \frac{5}{6}$
$\qquad$
$\qquad$
$\qquad$

## CHAPTER Integers and Rational Numbers

## 2 Multiple Choice Test C

## Choose the best answer.

1. Which replacement for $x$ makes this a true statement?
$x<-31$
A -42
C 5
B -12
D 45
2. Order the integers from least to greatest: $-84,22,0,-9,5$.
F 22, 5, 0, -9, -84
G $0,5,-9,22,-84$
H $-84,-9,0,5,22$
J -9, -84, 0, 5, 22
3. Find the absolute value $|-47|$.
A -47
C 1
B 0
D 47
4. At 6 A.m. the temperature was $-17^{\circ} \mathrm{C}$. In the afternoon, the temperature was $13^{\circ} \mathrm{C}$. What was the change of temperature during the day?
F $-30{ }^{\circ} \mathrm{C}$
H $15{ }^{\circ} \mathrm{C}$
G $-4{ }^{\circ} \mathrm{C}$
J $30^{\circ} \mathrm{C}$
5. Evaluate $a+b$ for $a=-62$ and $b=33$.
A -95
C -29
B -39
D 29
6. Add $23+(-19)$.
F -4
H 14
G 4
J 42
7. Find the difference $-55-67$.
A -122
C -2
B -12
D 12
8. Find the difference $28-(-37)$.
F -9
H 55
G 9
J 65
9. Find the product $13 \cdot(-9)$.
A 117
C -1.444
B 4
D -117
10. Find the quotient $-168 \div(-14)$.
F 12
H -12
G 0.083
J -182
11. Find the product $(-16) \cdot(-25)$.
A -400
C 0.615
B -41
D 400
12. Solve $n-12=-29$.
F $n=-46$
H $n=17$
G $n=-17$
J $n=46$
13. Solve $\frac{g}{8}=-11$.
A $g=-88$
C $g=-1 \frac{3}{8}$
B $g=-3$
D $g=19$
14. Josephine withdrew $\$ 281$ from her savings account. The current balance is $\$ 567$. How much was the balance before her withdrawal?
F -\$286
H \$848
G \$286
J \$159,327
15. Solve $-6+g=17$.
A -23
C 23
B 11
D -11
$\qquad$
$\qquad$
$\qquad$

## CHAPTER Integers and Rational Numbers

## 2 Multiple Choice Test C, continued

16. Which decimal is equivalent to $\frac{8}{15}$ ?
F 1.875
H 0.53
G 0.815
J 0.5
17. Beth bought 22 trading cards, of which 20 were sports cards. Which decimal shows what portion of the cards were sports cards?
A 2.833
C 0.647
B $0 . \overline{90}$
D 0.2833
18. Which decimal is equivalent to $\frac{5}{8}$ ?
F 0.58
H 0.625
G 0.85
J 0.375
19. Which group of decimals is in order from greatest to least?
A $0.702,0.72,0.207,0.27$
B $0.207,0.27,0.702,0.72$
C $0.702,0.207,0.72,0.27$
D $0.72,0.702,0.27,0.207$
20. Which number is the least?
F 0.39
H $\frac{1}{5}$
G 0.203
J $\frac{3}{8}$
21. Which number is greatest?
A $\frac{12}{25}$
C $\frac{45}{90}$
B 0.49
D 0.495
22. Which set of fractions is in order from least to greatest?
F $\frac{7}{8}, \frac{5}{9}, \frac{11}{13}$
H $\frac{5}{9}, \frac{7}{8}, \frac{11}{13}$
G $\frac{5}{9}, \frac{11}{13}, \frac{7}{8}$
J $\frac{7}{8}, \frac{11}{13}, \frac{5}{9}$
$\qquad$ Date $\qquad$ Class $\qquad$

## CHAPTER Integers and Rational Numbers

## 2 Free Response Test A

1. Which symbol, $<,>$, or $=$, makes the statement true? $-8 \square 7$
2. Order the integers from least to greatest: 0, -14, 10.
3. Find the absolute value $|-6|$.
4. At 6 A.m. the temperature was $-3^{\circ} \mathrm{C}$. In the afternoon, the temperature was $7{ }^{\circ} \mathrm{C}$. What was the change of temperature during the day?
5. Evaluate $a+b$ for $a=12$ and $b=-15$.
6. Add $16+(-9)$.
7. Evaluate $a-b$ for $a=-7$ and $b=14$.
$\qquad$
$\qquad$
$\qquad$

## CHAPTER <br> Integers and Rational Numbers

## 2 Free Response Test A, continued

16. Write the decimal that is equivalent to $\frac{4}{5}$.
17. Rochelle bought 20 trading cards, of which 13 were sports cards. Write the decimal that shows what portion of the cards were sports cards.
18. Write a fraction that is equivalent to 0.20 .
19. There were a total of 24 cars in a parking lot. Of those cars, 6 were blue. Write a decimal that shows the numbers of cars that were blue.
20. Which number is the least?
$\frac{3}{8}, 0.39,0.246, \frac{2}{5}$
21. Which number is greatest, $\frac{2}{3}, 0.6, \frac{3}{4}$, or $0.68 ?$
22. Write the set of fractions in order from least to greatest $\frac{1}{3}, \frac{2}{5}, \frac{3}{8}$.
$\qquad$ Date $\qquad$ Class $\qquad$

## CHAPTER Integers and Rational Numbers

## 2 Free Response Test B

1. Which symbol, $<,>$ or $=$, makes the statement true?
$-10 \square 19$
2. Order the integers from least to greatest:
$24,-11,0,-13,-9$.
3. Find $|-13|$.
4. At 6 A.m. the temperature was $-14^{\circ} \mathrm{C}$. In the afternoon, the temperature was $2^{\circ} \mathrm{C}$. What was the change of temperature during the day?
5. Evaluate $a+b$ for $a=35$ and $b=-18$.
6. Add $26+(-18)$.
7. Evaluate $a-b$ for $a=-12$ and $b=36$.
$\qquad$
$\qquad$
$\qquad$

## CHAPTER <br> Integers and Rational Numbers

## 2 Free Response Test B, continued

16. Write the decimal that is equivalent to $\frac{5}{8}$.
17. Michelle bought 80 trading cards. 36 of the cards were sports cards. Write the decimal that shows how many of the cards were sports cards.
18. Write a fraction that is equivalent to 0.85 .
19. There were a total of 32 clowns in the parade. Of those clowns, 8 were wearing a hat. Write a decimal that shows the number of clowns that were wearing a hat.
20. Which number is the least?
$0.675, \frac{4}{5}, 0.75, \frac{5}{8}$
21. Which number is greatest?
$\frac{6}{10}, 0.70, \frac{9}{12}, 0.72$
22. Write the set of fractions in order from least to greatest.
$\frac{10}{12}, \frac{8}{11}, \frac{7}{10}$
$\qquad$
$\qquad$
$\qquad$
$\qquad$ Date $\qquad$ Class $\qquad$

## CHAPTER Integers and Rational Numbers

## 2 Free Response Test C

1. Which symbol, $<,>$, or $=$, makes the statement true? -31 47
2. Order the integers from least to greatest: 56, -41, 3, -98, -74.
3. Find the absolute value $|-351|$.
4. At 6 A.m. the temperature was $-32^{\circ} \mathrm{C}$. In the afternoon, the temperature was $27^{\circ} \mathrm{C}$. What was the change of temperature during the day?
5. Evaluate $a+b$ for $a=-78$ and $b=56$.
6. Add $52+(-37)$.
7. Evaluate $a-b$ for $a=-62$ and $b=49$.
$\qquad$
$\qquad$
$\qquad$

## CHAPTER <br> Integers and Rational Numbers

## 2 Free Response Test C, continued

16. Write the decimal that is equivalent to $\frac{1}{16}$.
17. Sammy bought 36 trading cards, of which 8 were sports cards. Write the decimal that shows how many of the cards were sports cards.
18. Write a fraction that is equivalent to 0.35 .
19. There were a total of 32 questions on a test. Of those questions, Sophie answered 28 correct. Write a decimal that shows the numbers of questions that she answered incorrectly.
20. Which number is the least?
$\frac{2}{5}, 0.39, \frac{3}{8}, 0.246$
21. Which number is greatest, $\frac{17}{20}, 0.78$, $\frac{31}{40}$, or $0.87 ?$
22. Write the set of fractions in order from least to greatest: $\frac{7}{9}, \frac{9}{11}, \frac{5}{8}$.

## Integers and Rational Numbers

## Answers

| Section A Quiz | 14. B |
| :---: | :---: |
| 1. B | 15. B |
| 2. J | 16. D |
| 3. A | 17. A |
| 4. H | 18. B |
| 5. A | 19. D |
| 6. H | 20. B |
| 7. B | 21. D |
| 8. F | 22. A |
| 9. C | Multiple Choice Test B |
| 10. G | 1. A |
| Section B Quiz | 2. H |
| 1. A | 3. D |
| 2. H | 4. J |
| 3. C | 5. B |
| 4. J | 6. H |
| 5. D | 7. C |
| 6. G | 8. J |
| 7. C | 9. A |
| Multiple Choice Test A | 10. H |
| 1. D | 11. A |
| 2. A | 12. H |
| 3. B | 13. A |
| 4. D | 14. J |
| 5. D | 15. A |
| 6. B | 16. J |
| 7. B | 17. C |
| 8. A | 18. G |
| 9. A | 19. D |
| 10. A | 20. G |
| 11. B | 21. D |
| 12. B | 22. H |
| 13. D |  |


| Multiple Choice Test C | 13. -18 |
| :---: | :---: |
| 1. A | 14. \$169 |
| 2. H | 15. 37 |
| 3. D | 16. 0.8 |
| 4. J | 17. 0.65 |
| 5. C | 18. $\frac{1}{5}$ |
| 6. G | 18. |
| 7. A | 19. 0.25 |
| 8. J | 20. 0.246 |
| 9. D | 3 |
| 10. F | 21. $\frac{4}{4}$ |
| 11. D | 132 |
| 12. G | 2. $\frac{1}{3}, \frac{8}{8}, \frac{5}{5}$ |
| 13. A | Free Response Test B |
| 14. H | 1. < |
| 15. C | 2. $-13,-11,-9,0,24$ |
| 16. H | 3. 13 |
| 17. B | 4. $16{ }^{\circ} \mathrm{C}$ |
| 18. H | 5. 17 |
| 19. D | 6. 8 |
| 20. H | 7. -48 |
| 21. C | 8. 59 |
| 22. G | 9. -90 |
| Free Response Test A | 10. 13 |
| 1. < | 11. -36 |
| 2. $-14,0,10$ | 12. -20 |
| 3. 6 | 13. -48 |
| 4. $10^{\circ} \mathrm{C}$ | 14. $\$ 579$ |
| 5. -3 | 15. 32 |
| 6. 7 | 16. 0.625 |
| 7. -21 | 17. 0.45 |
| 8. 40 | 18. 17 |
| 9. -24 |  |
| 10. 8 | 19. 0.25 |
| 11. 20 | 20. $\frac{5}{8}$ |
| 12. -7 |  |

1. A
2. H
3. D
4. J
5. C
6. G
7. A
8. J
9. D
10. F
11. D
12. G
13. A
14. H
15. C
16. H
17. B
18. H
19. D
20. H
21. C
22. G

Free Response Test A
$1 .<$
2. $-14,0,10$
3. 6
4. $10^{\circ} \mathrm{C}$
5. -3
6. 7
7. -21
8. 40
9. -24
10. 8
12. -7
13. -18
14. \$169
15. 37
16. 0.8
17. 0.65
18. $\frac{1}{5}$
19. 0.25
20. 0.246
21. $\frac{3}{4}$
22. $\frac{1}{3}, \frac{3}{8}, \frac{2}{5}$

Free Response Test B

1. <
2. $-13,-11,-9,0,24$
3. 13
4. $16{ }^{\circ} \mathrm{C}$
5. 17
6. 8
7. -48
8. 59
9. -90
10. 13
11. -36
12. -20
13. -48
14. $\$ 579$
15. 32
16. 0.625
17. 0.45
18. $\frac{17}{20}$
19. 0.25
20. $\frac{5}{8}$
21. $\frac{9}{12}$
22. $\frac{7}{10}, \frac{8}{11}, \frac{10}{12}$

## Free Response Topest C

1. <
2. $-98,-74,-41,3,56$
3. 351
4. $59^{\circ} \mathrm{C}$
5. -22
6. 15
7. -111
8. 189
9. -351
10. 16
11. 1,242
12. -44
13. -330
14. \$1,630
15. 33
16. 0.0625
17. $0 . \overline{2}$
© Houghton Mifflin Harcourt Publishing Company
18. $\frac{7}{20}$
19. 0.125
20. 0.246
21. 0.87
22. $\frac{5}{8}, \frac{7}{9}, \frac{9}{11}$

Performance Assessment

1. 8 tables $\times 14$ chairs $=112$ eighth graders
12 tables $\times 14$ chairs $=168$ seventh graders
2. 672 appetizers; 2 for each seventhgrader, 3 for each eighth-grader.
3. $\frac{3}{5}$ of the students are seventh graders.
4. $x=(168-155)+(112-95)$;
$x=30 ; 30$ students did not attend.
5. The fraction of students expected to attend that are seventh graders is $\frac{168}{280}=\frac{60}{100}$. The fraction of students who did attend that are seventh graders is $\frac{155}{250}=\frac{62}{100} \cdot \frac{62}{100}>\frac{60}{100}$.

## Cumulative Test

1. B
2. H
3. $A$
4. $F$
5. D
6. F
7. B
8. G
9. B
10. H
11. A
12. J
13. C
14. J
15. B
16. J
17. A
18. H
19. A
20. H
21. A
22. F
23. C
24. H
25. D
26. H
