

Bell Curves Pre-SHSAT Workbook Answer Key 2020

4. 34,080

1. B
2. G
3. A
4. H
5. A
6. F

Arithmetic Foundations:

Page 10:

1. 72
2. 23
3. 32
4. 51
5. 62
6. 18
7. 14
8. 24
9. 48
10. 12
11. 55
12. 47
13. 88
14. 33
15. 123
16. 372

Page 2:

Integer: A number with no fraction or decimal,

True, True

Whole: Non-negative number with no fraction or decimal

Even/Odd: Even – An integer divisible by 2, Odd – An integer not divisible by 2, False, True

Consecutive: Numbers that follow one another in a defined sequence

Sum/Difference: Sum – Answer to an addition question, Difference – Answer to a subtraction question
21, 5

Product/Quotient: Product – Answer to a multiplication question, Quotient – Answer to a division question

50, 2

Remainder: The integer left over after a division problem

4 R 3

Divisor: Number by which another number is to be divided

Dividend: A number to be divided by another number

Distinct: Different

Inclusive/Exclusive: Inclusive – A list that includes the first and last term, Exclusive – A list that does NOT include the first and last terms

Page 11:

1. 26
2. 29
3. 22
4. 16

Page 12:

1. 8
2. 5
3. 6

Page 13:

- 912 divisible by 3 – NO
804 divisible by 4 – YES
516 divisible by 6 – YES
1845 divisible by 9 – YES
487 divisible by 12 – NO

Page 14:

1. 324, 380, 452
2. 96, 204, 312, 504
3. NONE
4. 68, 118, 308, 412
5. 110
6. 96
7. 204
8. 330

Page 16:

1. 2
2. 12
3. 38
4. 13
5. 84
6. 26
7. 12
8. 94

Page 20:

Page 23:

1. 2
2. -46
3. -28
4. 14
5. 59
6. 32
7. -56
8. -99
9. 90
10. -21
11. -2
12. -82
13. -8

Page 24-25:

1. 91
2. 132
3. \$511
4. \$186
5. \$20
6. \$38
7. 5th
8. C

Page 27:

1. 12
2. 10
3. 24
4. 52
5. 75
6. 77
7. 42
8. 36
9. 280
10. 120
11. 60
12. 150
13. 180

Page 29:

1. 1, 2, 3, 5, 6, 10, 15, 30
 2. 1, 2, 4, 5, 8, 10, 16, 20, 40, 80
 3. 1, 2, 3, 6, 9, 18, 27, 54
 4. 1, 2, 3, 4, 5, 6, 8, 10, 12, 15, 20, 24, 30, 40, 60, 120
- Prime: 13, 29, 83, 97, 131, 181, 191, 199, 227, 293

Page 31:

1. 9
2. 11

Page 6:

1. 5848
2. 1536
3. 23,814
4. 1620
5. 9468
6. 9486
7. 25,830
8. 3806
9. 18,300
10. 2035
11. 39,483
12. 7020
13. 40,095
14. 9516
15. 1089
16. 240,000

Page 7:

1. 780
2. 9432
3. 5936

3. 16
4. 3
5. 7
6. 25
7. 9
8. 18
9. A
10. B

Page 33:

1. $2 \times 2 \times 2 \times 11$
2. $3 \times 3 \times 11$
3. $2 \times 2 \times 3 \times 3 \times 5$
4. 101×2
5. 3×53
6. $2 \times 5 \times 5 \times 7$
7. $2 \times 2 \times 2 \times 2 \times 5 \times 5$
8. $2 \times 2 \times 2 \times 5 \times 11$
9. 5×89
10. $2 \times 3 \times 7 \times 11$
11. $2 \times 2 \times 2 \times 2 \times 2 \times 3 \times 5$
12. $2 \times 2 \times 2 \times 3 \times 5 \times 5$

Page 35:

LCM:

1. $3 \times 3 \times 5 \times 7 \times 7 \times 11$
2. $2 \times 3 \times 7 \times 7 \times 7 \times 11$
3. $2 \times 2 \times 2 \times 2 \times 5 \times 5 \times 7 \times 11$
4. $3 \times 3 \times 5 \times 7 \times 7 \times 7 \times 13$

GCF:

1. $3 \times 5 \times 7$
2. $2 \times 7 \times 7$
3. 2
4. 7×13

Page 36:

1. A
2. F
3. A
4. F
5. C
6. F
7. D
8. F
9. C
10. H

Page 38-39:

1. C
2. G
3. B
4. E
5. A
6. E
7. A
8. G
9. D
10. G
11. B

12. F
13. B
14. E
15. A
16. G

Page 40-42:

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

Page 44:

1. Negative
2. 1
3. Greater than
4. Positive
5. 18
6. | |
7. Itself
8. False
9. False
10. 2
11. False

Page 45:

- 5679.48: Positive
 678,388: Whole, Even, Positive
 4567.0: Whole, Odd, Positive
 $7 + (-2 + 4) - 9$: Whole, Even
 $3 - (-6 \times 3) + 4 - 9$: Whole, Even, Positive
 $5 - 9 + 4$: Whole, Even
 $|-4.3|$: Positive
 $-|-6 \times 4 + 3|$: Odd, Negative

Page 46-48:

1. 13
2. -12

3. 73
4. 0
5. 18
6. -1
7. -60
8. 13
9. 28
10. 480
11. 920: 1, 2, 11, 22, 41, 82, 451, 902
 816: 1, 2, 3, 4, 6, 8, 12, 16, 17, 24,
 34, 48, 51, 68, 102, 136, 204, 272,
 408, 816
 513: 1, 3, 9, 19, 27, 57, 171, 512
12. 1
13. 4
14. -37
15. -0.25
16. -13
17. 101
18. 1
19. 3, 2
20. 26
21. 20
22. 1, 2, 3, 4, 6, 12
23. 2, 3
24. 12, 24, 36
25. 4
26. 48
27. 0
28. 2
29. 93

Page 49-54:

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

27. 9
28. G
29. B
30. H
31. 4
32. E
33. B
34. F
35. A
36. G
37. C
38. H
39. D
40. F
41. C
42. G
43. D
44. 22
45. -12
46. E
47. B
48. H
49. D
50. H
51. C
52. E
53. D
54. F

Fractions & Decimals:

Page 59:

1. C
2. A
3. C
4. D
5. A
6. C
7. B

Page 60:

- $120/5 = 48/2, 24$
 $49/3 = 16 \frac{1}{3}, 98/6$
 $190/6 = 31 \frac{2}{3}$
 $1/8 = 8/64, 5/40$
 $(6 + 5)/5 = 2 \frac{1}{5}$
 $22/36 = 44/72, 11/18$
 $81/9 = 9, 27/3$
 $15/6 = 5/2, 2 \frac{1}{2}$
 $4/3 = 1 \frac{1}{3}$
 $12/21 = 4/7$
 $14/18 = 7/9, 42/54$

Page 62:

1. $2/3$
2. $8/9$
3. $13/20$
4. $1/6$
5. $123/100$

6. $13/18$
7. $16/45$
8. $79/156$
9. $21/40$
10. $19/50$
11. $1/110$
12. $13/12$
13. $11/30$
14. $26/35$

Page 64:

1. $44/9$
2. $43/7$
3. $17/3$
4. $79/7$
5. $139/8$
6. $46/11$
1. $2 \frac{1}{5}$
2. $4 \frac{1}{9}$
3. $7 \frac{2}{7}$
4. $12 \frac{3}{5}$
5. $6 \frac{5}{12}$
6. $11 \frac{1}{4}$

Page 65:

1. 5
2. $10/7$
3. $3/11$
4. $27/2$
5. $31/14$
6. $237/10$

Page 66-69:

1. B
2. $1 \frac{1}{12}$
3. A
4. $23/20$
5. $26/5$
6. $5/6$
7. $133/60$
8. $751/24$
9. C
10. D
11. $15 \frac{13}{20}$
12. $1/30$

Page 70:

1. A
2. H

Page 72:

1. $21/88$
2. $5/27$
3. 6
4. $85/4$
5. $205/24$
6. 1
7. $49/5$

Page 73-74:

1. Jackie (30 vs. 28)
2. Jackie (30 vs. 28 vs. 25 vs. 24)
3. 24
4. $3 \frac{1}{15}$
5. $17 \frac{13}{32}$
6. $1 \frac{31}{32}$

Page 76:

1. $55/84$
2. $8/55$
3. $124/15$
4. $130/69$
5. $16/45$
6. $9/2$
7. $17/72$

Page 77-78:

1. $2 \frac{8}{15}$
2. $11/8$
3. 22 full servings
4. $3/17$
5. 9
6. 40 beans, 150 water
7. $7/96$ eggs, $19/108$ OJ, 2 toast

Page 79-80:

1. C
2. H
3. D
4. E
5. 60
6. F
7. B
8. H
9. C
10. H
11. C
12. G
13. D

Page 82:

1. 2 ones
2. 5 hundreds
3. 4 hundreds
4. 7 thousands
5. 4 hundreds
6. 0 ten thousands
7. 0 ones

Page 83:

1. One thousand, three hundred eighty two
2. Four hundred seventy six and twenty eight hundredths
3. Eight thousand, seventy four and one hundred sixty five thousandths

Page 84:

1. 700
2. 0.8
3. 800,000
4. 5
5. 0.007
6. 0.03
7. 500
8. 20
9. 851
10. 9406.7
11. 7870.083
12. 403.506
13. 437.034

Page 85:

1. C
2. C
3. D
4. B
5. B
6. B

Page 87:

1. 26,748.33
2. 590
3. 784
4. 40,000
5. 350
6. 50
7. 1056.4
8. 12,487.99
9. 795.9
10. 334.5

Page 89:

1. 2633.7
2. 1008.789
3. 11.29
4. 121.667
5. 211.52
6. 70.66
7. 169.48
8. 994.655
9. 562.302
10. 392.401
11. 9591.989

Page 90:

1. 20.31
2. 81.38
3. 263.08
4. 19.31

Page 92:

1. 3270.488
2. 2.4358
3. 755.076
4. 70,239.4
5. 4.032

6. 48.298
7. 430.32
8. 1689.996
9. 1.9476
10. 348.172
11. 147.852
12. 49.1055
13. 58.8669
14. 51.5928

Page 94:

1. 18.2
2. 13
3. 17.9
4. 85.6
5. 6.5
6. 54.7
7. 60.2
8. 59.6
9. 11.3
10. 0.6
11. 57.1
12. 201.1
13. 12.75
14. 27.54

Page 95-96:

1. 16.4
2. 29
3. 1004.4
4. 448.06
5. 12.265
6. 451.15
7. 1.05

Page 98:

1. 0.625
2. 0.88
3. 13.5
4. 4.625
5. 0.48
6. 5.4375
7. 0.64
8. -0.725
9. -0.75, 0.125, $\frac{2}{5}$, $\frac{3}{4}$, 1
10. $-\frac{9}{10}$, $\frac{1}{2}$, $\frac{4}{6}$, $\frac{3}{4}$, 0.8
11. -1.2, -0.8, $-\frac{3}{4}$, -0.6, $\frac{5}{9}$
12. $-\frac{2}{10}$, -2.75, $-\frac{2}{7}$, $\frac{10}{10}$, $-\frac{4}{5}$

Page 99-100:

1. B
2. G
3. A
4. G
5. C
6. H
7. 1.9
8. G
9. B

10. F
11. A
12. G
13. C
14. H
15. B
16. G
17. D

Page 102-103:

1. $\frac{1}{5}$
2. $\frac{1}{3}$
3. $\frac{1}{40}$
4. $\frac{17}{18}$
5. $3\frac{3}{35}$
6. $-\frac{3}{5}$
7. $\frac{91}{110}$
8. $\frac{2}{21}$
9. 182
10. $\frac{2}{3}$
11. $\frac{3}{14}$
12. $\frac{3}{8}$
13. 98,532.968
14. 15.8009
15. 16.1492
16. 0.0168
17. 0.02
18. $\frac{5}{36}$
19. $\frac{9}{5}$
20. $\frac{1}{7}$
21. 3
22. $\frac{3}{31}$
23. $\frac{2}{3}$
24. 1
25. $\frac{5}{16}$
26. $\frac{1}{9}$
27. $\frac{7}{24}$
28. $\frac{1}{55}$
29. $\frac{1}{12}$

Page 104-106:

1. 675
2. $5\frac{1}{100}$
3. 203
4. $21\frac{7}{10}$
5. 246
6. Monroe by 14
7. Hector: 60, Mark: 120, Lou: 72
8. $15\frac{3}{16}$

Page 107-110:

1. 54
2. F
3. C
4. F
5. C
6. F
7. B
8. G

9. B
10. G
11. D
12. G
13. C
14. F
15. 3
16. G
17. A
18. E
19. B
20. G
21. D
22. G
23. B
24. F
25. B
26. H
27. B
28. F
29. B
30. G
31. C

Ratios & Proportional Relationships:

Page 113:

1. 1 to 2, 1:2, $\frac{1}{2}$
2. 3 to 4, 3:4, $\frac{3}{4}$
3. 11 to 24, 11:24, $\frac{11}{24}$
4. 5 to 3, 5:3, $\frac{5}{3}$
5. 20 to 14, 20:14 (10:7), $\frac{10}{7}$

Page 114-116:

1. Gloria
2. Emily
3. Julia
4. 2013
5. Lori
6. $\frac{2}{7}$
7. $\frac{1}{5}$
8. a. 2:3; b. 3:4; c. 7:4; d. 33
9. 40:30 (4:3)
10. 30:120 (1:4)
11. 40:150 (4:15)
12. 50:150 (1:3)
13. 30:170 (3:17)
14. 35:40 (7:8)
15. 25:155 (5:31)

Page 118:

1. 6
2. 5
3. 10
4. 1
5. 64
6. 6
7. 99
8. 125

9. 13
10. 100
11. 14
12. 9
13. 84
14. 25

Page 119-121:

1. False
2. True
3. True
4. 40
5. 17.5
6. 3
7. \$1
8. 12
9. \$301
10. 240
11. 24
12. 144 teaspoons, 1152 marshmallows
13. 150 lines, 10 pages

Page 122-123:

1. B
2. D
3. D
4. B
5. D
6. B
7. C
8. C
9. D
10. B

Page 124-125:

1. C
2. H
3. C
4. H
5. C
6. F
7. D
8. G
9. B
10. E
11. 60
12. E
13. D
14. G
15. D
16. F

Page 127:

1. Isaiah ran 1.5 more than Lucas/wk
2. Violet made 4 more than Samira/wk
3. Sol drove 5 more than Lauren/day

Page 128-129:

1. D
2. F
3. B
4. H
5. A
6. G
7. D
8. E
9. B
10. H
11. B
12. F
13. D
14. H
15. D

Page 132:

1. 4,000,000
2. 5
3. 81,000
4. 850,000
5. 4.5

Page 133:

1. 56
2. 36
3. 6.195
4. 608
5. 7 meters, 5 cm
6. 6 feet, 3 in
7. 180,000
8. 1 dozen
9. 10 km
10. 0.056
11. 32

Page 134:

1. 1,600,000
2. 780
3. 96
4. 17
5. 60

Page 135:

1. 114.75
2. 24
3. 20

Page 137-138:

1. A
2. G
3. A
4. F
5. B
6. 69
7. A
8. G
9. B
10. G

11. D
12. 38
13. A
14. H

15. 26%
16. 725
17. \$22.60

4. 10/189
5. 8/15
6. 3/140
7. Strawberries: 156, Kiwi: 13, Mango: 6.5, Apples: 26
8. B

Page 140:

1. 5
2. 5.5
3. 81/2
4. 5
5. 1/3

Page 155-157:

1. B
2. G
3. C
4. E
5. B
6. E
7. A
8. H
9. B
10. E
11. D
12. G
13. C
14. F
15. 13
16. G
17. B
18. G
19. D
20. G
21. C
22. 84
23. B

Page 163:

1. 20
2. 24
3. a. 88, b. 19:25, c. 43%
4. 12:64 (3:16)
5. 18%
6. 22
7. 56.8%

Page 142:

1. D
2. F
3. D
4. F
5. C
6. G
7. D
8. H

Page 164-166:

1. D
2. B
3. B
4. C
5. B
6. A
7. D
8. C
9. B
10. C
11. 13.8
12. 37 hours, 30 minutes
13. 9 5/16

Page 144-145:

1. 40%
2. 75%
3. 25%
4. 30%
5. 60%
6. 12%
7. 33.3%
8. 62.5%
9. 28.8
10. 3.6
11. 12.5%

Page 159:

1. 7/10, 70%, 0.7
2. 3/5, 60%, 0.6
3. 7/5, 140%, 1.4
4. 13/10, 130%, 1.3
5. 29/100
6. 85%
7. 0.3888
8. 0.47
9. 0.789%
10. 0.00578
11. 289/500
12. 289/500
13. 27.2727%
14. 2619/2500

Page 167:

1. 512
2. 69
3. 3.15
4. 5.4
5. \$72
6. 4:27

Page 147:

1. 33.8
2. 4.56
3. 41.6
4. 26.84
5. 1000
6. 111
7. 390%

Page 168:

1. 117
2. 20%
3. 20%
4. 33
5. 1%
6. 4
7. 30
8. 300

Page 150-153:

1. 6%
2. \$13
3. 42.9%
4. \$243
5. \$7259.20
6. \$6.16
7. 50
8. \$6.23
9. \$1750.24
10. \$288
11. \$1.50
12. \$35.79
13. 5487
14. 24%

Page 160:

- 1/2, 0.5, 50%
- 1/3, 0.333, 33.33%
- 1/4, 0.25, 25%
- 1/5, 0.2, 20%
- 1/6, 0.1666, 16.666%
- 1/8, 0.125, 12.5%
- 1/9, 0.111, 11.111%
- 1/10, 0.1, 10%

Page 169-170:

1. \$27.15
2. 5%
3. 7%
4. \$7.50
5. 40%
6. Towel (21%)
7. \$31.64

Page 162:

1. 1/2
2. 33/40
3. 35/3

Page 171:

- I:
- 0.6
 - 0.27
 - 3.04
 - 2.375
 - 3.333
 - 0.155
 - 0.000173

- II:
- $\frac{1}{2}$
 - $\frac{1}{4}$
 - 23/10,000
 - 6/5
 - 3405/1000
 - 450/100

- III:
- 75%
 - 8%
 - 90%
 - 280%
 - 500%
 - 0.12%
 - 470%

Page 172:

- Yes
No
No
Yes
No

Page 173-181:

- D
- 30
- C
- H
- A
- G
- C
- G
- A
- E
- 48
- E
- B
- F
- C
- 325
- D
- 171
- D
- E
- D
- G
- D
- G
- C
- F
- D

- G
- 84
- G
- A
- H
- 35
- E
- A
- H
- A
- F
- B
- 135
- D
- H
- A
- G
- A
- H
- A
- E
- D
- G
- D
- E
- C
- H
- C
- E
- D
- 8
- A
- F
- A
- G
- B
- G
- A

Expressions & Equations:

Page 185:

- 8n
- Z - 27
- F + 16
- 45 - j
- 18/b
- 33m
- 90 + w
- 72/d
- B
- A
- A
- C

Page 187-188:

- C

- C
- B
- A
- B
- C
- C
- D
- B
- A

Page 190:

- $$2y^2, 8y^2$$
- $$3^9, 5^{23}, y^{10}, p^{15}$$
- $$x^2, 7^9, 3^2$$
- $$x^{15}, 2^{12}, 9x^8$$
- 0, 0, 0
1, 1, 1
7, 12, 36
1/7, 1/8, 1/36

Page 191:

- 45
- 381
- 1639
- 0
- 561
- $x^3 + 12$
- 89
- $15 + y^9$
- 113
- $x^2 + 2x + 10$
- 56
- $x^2 + 6x + 9$
- 243
- 21
- 5
- 0
- 1/9
- 1/64

Page 192:

- 26
- G
- B
- G
- A
- E

Page 194:

- 5n
- P + q
- 15g + 9i
- K + l
- 0
- 26m + 26f
- 4a + 28b
- 6v + 16w

Page 196:

1. $35 - 5x$
2. $9x + 81$
3. $33x + 99$
4. $14x^3 - 28x^2$
5. $6x - 48$
6. $32y + 24xy$
7. $90 + 27x$
8. $-x - 25$
9. B
10. D
11. B
12. A

Page 198:

1. $x^2 + 13x + 42$
2. $x^2 + 5x - 36$
3. $x^2 - 8x + 15$
4. $x^2 + 16x + 64$
5. $x^2 - 18x + 81$
6. $x^2 + 13x + 30$
7. $108 - 21x + x^2$
8. $x^2 + 21x + 90$

Page 200:

1. $7(4x + 11)$
2. $48x(1 + 2y)$
3. $9(5 + 2a)$
4. $8j(2p + 9)$
5. $5(4k + 19)$
6. $3x(9w + 11)$
7. A
8. C
9. A

Page 202-203:

1. A
2. E
3. C
4. G
5. D
6. G
7. D
8. F
9. B
10. E
11. B
12. G
13. C
14. H
15. D
16. E
17. B
18. -720
19. B

Page 206:

1. B
2. D
3. C

4. B
5. A
6. D
7. D
8. A
9. C
10. D
11. B

Page 208-211:

1. 37.25
2. 152
3. 34
4. 59
5. \$4.23, \$0.41
6. \$6.02, \$1.44, \$2.01, \$100.56
7. 3.3, 57.2
8. 4
9. 269.8
10. 26
11. 52
12. 90
13. 16
14. 14,000

Page 213:

1. $2y - 7/2$
2. $4 + 2y/3$
3. $5/2 - 5y$
4. $50y/3 - 2$
5. $66y$
6. $4/7y$
7. $20y - 48$
8. $0.2y - 5$
9. $6/15 - 12/15y$
10. $2/9y + 1/18$
11. $9 - 10/y$
12. $2 - 10/3y$

Page 214:

1. -8
2. 7
3. B
4. E
5. D
6. -7
7. A
8. E

Page 218:

1. a. 15, b. 1: 12, 2: 4, c. D
2. a. J, b. 4, c. H
3. a. 12, b. Mon: 4, Tues: 2, c. C
4. a. 6, b. 22, c. E

Page 219-221:

1. D
2. H
3. B

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

Page 225:

1. $y < 13/2$
2. $y < \text{or equal to } 2$
3. $y > \text{or equal to } -\frac{1}{2}$
4. $-1 < \text{or equal to } y$
5. $x > -2.4$
6. $3 < j < 4$
7. $13 < f < 18$
8. 2

Page 226:

1. D
2. B
3. A
4. C

Page 227-228:

1. A
2. F
3. A
4. G
5. C
6. H
7. A
8. H
9. C
10. H
11. C
12. H
13. D
14. F
15. A
16. E
17. C

Page 230:

Half a number: $x/2$, $1/2x$

One third a number: $x \div 3$

Twice a number: $2x$

Seven less than a number: $x - 7$

Three more than twice a number: $2x + 3$, $3 + 2x$

Six divided by a number: $6/x$

A number less than 5: $5 > x$

4 less than a number: $x - 4$

Twice the sum of a number and 5: $2x + 10$

The product of 6 and three times a number:
 $18x$

Page 231:

1. $27x + 126$
2. $40x - 95$
3. $54x - 246$
4. $-77x - 187y - 121$
5. $225x + 225 - 120y$
6. $-119 - 84x - 42y$
7. $-85x + 204y + 68$
8. $30x + 160y + 130$
9. $9x + 5$
10. $14.2x - 5.6$
11. $53.5 + 53.5p$
12. $-33.1x - 21.1$
13. $-41 - 19x$
14. $13x + 18.2$
15. $39.6 - 36y + 7.4x$

Page 232-233:

1. $x + 13$
2. $L = 5P$
3. $2(x + y)$
4. $5h + 6w = \$12$
5. 3
6. 15
7. 15
8. 13
9. 0
10. 1.7
11. 18
12. 67.5
13. 44%
14. 9
15. 5
16. 80
17. 16
18. 43
19. 10
20. 118
21. 16
22. 90
23. 45 decreased by some number
24. The product of 11 and the sum of x and 16

25. The sum of 52 times a number and 11 times a different number equals 107

26. The quotient of 4 and y is equal to the quotient of x and 24

27. The quotient of 48 and m equals the product of 8 and the difference of n and the square of m

28. The cube of some number is equal to the product of 49 and that number

Page 235-236:

1. 10
2. 60
3. 9
4. -88
5. 20
6. 10
7. 2.5
8. 15
9. 12
10. -10
11. 5
12. 7
13. -20
14. $15/7$
15. 12
16. 5
17. 6
18. 3
19. 9
20. $2/3$
21. $20/9$
22. -1
23. 2
24. -8
25. 43
26. 6

Page 237-238:

1. 94
2. 131
3. 55
4. 65
5. 3376.25
6. 251
6. $\$4.17$
7. $\$17.35$

Page 239-246:

1. C
2. G
3. D
4. H
5. 50
6. F
7. C
8. H

9. D
10. G
11. A
12. E
13. C
14. G
15. 30
16. H
17. -33
18. G
19. D
20. E
21. B
22. H
23. C
24. H
25. C
26. E
27. D
28. E
29. B
30. H
31. 17
32. H
33. B
34. F
35. C
36. G
37. -51
38. E
39. D
40. E
41. D
42. F
43. D
44. F
45. 13
46. H
47. D
48. E
49. D
50. G
51. A
52. G
53. D
54. F
55. C
56. F
57. D
58. E
59. D
60. 1
61. B
62. G
63. D
64. F
65. A

Geometry:

Page 251:

1. 20
2. 44
3. 13
4. 7
5. 38
6. 149

Page 252-253:

1. C
2. H
3. B
4. G
5. C
6. 96
7. C
8. G
9. C
10. 492
11. A
12. E
13. B
14. F

Page 255:

1. 70
2. 32
3. 66
4. 36
5. 49.6

Page 257:

1. 63
2. 78
3. 98.3
4. 72.3
5. 98

Page 260:

1. C
2. D

Page 261:

1. B
2. F
3. B
4. F
5. B

Page 262:

- a. 180
- b. 180
- c. 20

Page 263:

1. 5
2. 48
3. 864

4. 2052

5. 3
6. 12
7. 11.33
8. 48
9. 15,552

Page 264:

1. C
2. F
3. B
4. H
5. D
6. H
7. D

Page 266:

1. 36π
2. 12
3. 11
4. 4.5π
5. 90
6. 16, 64π , 16π
7. 5, 25π , 10π
8. 13, 26, 26π
9. y , πx^2 , $2x\pi$

Page 267-268:

1. D
2. F
3. 75
4. H
5. B
6. G
7. C
8. F
9. A
10. H
11. B
12. H

Page 270:

1. Volume = 240, SA = 256
2. Volume = 377.28, SA = 542.32
3. Volume = 198.72, SA = 706.08

Page 271:

1. 216
2. 11
3. 550
4. 60
5. 96
6. 486

Page 273:

1. 168.144
2. 9.75
3. 19

Page 274:

1. B
2. E
3. B
4. H
5. C
6. G
7. B

Page 276:

1. a. 60, b. Supplementary
2. 37°
3. a. 67.5, b. 22.5
4. 163
5. 180
6. 90
7. 38

Page 277:

1. B
2. E
3. D
4. E
5. 85
6. E

Page 280:

1. T
2. T
3. F
4. T
5. F
6. F
7. T
8. F
9. T
10. 180
11. =
12. 90° angles

Page 281:

1. 9
2. 12
3. 7
4. 36
5. 300
6. 70
7. 10
8. 60

Page 282:

1. 35
2. 22
3. 8
4. Add up to 90
5. 13.5
6. 90 and 58
7. 5 yds = 15 ft

Page 283:

1. 25π
2. 24π
3. 13
4. 50π
5. 169π
6. 14π
7. 22
8. 9π

Page 284-290:

1. 110
2. E
3. D
4. E
5. A
6. F
7. C
8. H
9. B
10. F
11. C
12. 6
13. B
14. H
15. 2
16. F
17. B
18. F
19. B
20. H
21. B
22. F
23. 10
24. F
25. D
26. E
27. 1200
28. H
29. B
30. F
31. B
32. F
33. B
34. 56
35. D
36. E
37. C
38. F
39. B
40. E
41. B
42. F
43. C
44. 118
45. C

Statistics & Probability:

Page 293:

1. Bias
2. Random
3. Bias
4. Bias
5. Random

Page 294:

1. B
2. B
3. C
4. C
5. D

Page 296:

1. C
2. D
3. A
4. B
5. A

Page 299:

1. Simpson
2. 7th grade
3. \$24
4. 25

Page 300-301:

1. med: 78, mode: 78
2. r: 798, m: 1316
3. 9.28
4. r: 58, m: 38.6
5. a. 3, b. 3, c. 1, d. 6
6. a. c, b. $(a + b + c + d + e)/5$
7. a. median, b. mode, c. mode
8. a. 19, b. 38, c. 41.2, d. 33

Page 303

D

Page 305

1. a. 46, b. 6, c. 35.7
2. a. 61, b. 8
3. a. 1, b. 3

Page 307

1. Mode: 3, Median: 3, Mean: 3.3
2. Mode: 0.5, Median: 1, Mean: 1.1
3. Mode: 3, Median 4

Page 311-313:

1. B
2. E
3. C
4. E
5. B
6. H
7. 18
8. G

9. 6

10. H
11. B
12. H
13. B
14. E
15. C
16. H
17. B
18. F
19. C
20. H
21. B

Page 316:

1. B
2. H
3. 48
4. F
5. C

Page 319:

1. B
2. 720
3. C
4. F
5. C
6. 4

Page 322:

1. $1/6$
2. $1/4$
3. $5/7$
4. $81/289$
5. $1/4$
6. $22/35$

Page 323-324:

1. A
2. B
3. D
4. D
5. B
6. A
7. B
8. C

Page 326-327:

1. 32
2. 127
3. 42
4. 24
5. 13
6. 45
7. 42
8. 26

Page 328-330:

1. D

2. H
3. A
4. F
5. C
6. F
7. A
8. G
9. A
10. G
11. B
12. G
13. B
14. E
15. C

Page 332:

1. 15
2. 18
3. 10
4. 145
5. 2.5
6. \$7.40
7. 0.248

Page 333:

1. 1/36
2. 1/18
3. 70%
4. 4/5
5. 1/2
6. 11/40

Page 334:

1. \$143
2. \$130
3. \$170
4. 23/119
5. ½
6. 32

Page 335-340:

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

19. C
20. 34
21. C
22. F
23. A
24. G
25. 2800
26. E
27. 10
28. E
29. D
30. F
31. B
32. F
33. A
34. H
35. B
36. B
37. G
38. H

Reading Comprehension:

Page 344:

- No
- No
- No
- No
- Yes
- Yes
- Yes
- No
- Yes
- No

Page 345:

- No
- Yes
- No
- Yes
- No
- No
- No
- Yes

Page 346:

- Yes
- No
- Yes
- No
- Yes
- No
- Yes
- Yes

Page 347:

1. I was having trouble keeping my eyes open.

2. Megan did not order a pizza that Hailey likes.
3. Linda saw something she liked outside.
4. Shamir referred to sleep with the lights on.
5. Karen did not want to have the window open.
6. The noise caused the dog to react.
7. The host had ordered more chocolate cake than was needed.
8. Bell bottoms are less popular than they used to be.

Page 349-350:

Sally has to live up to her older sister, but because of her, teachers are friendly.
 Mayan building decorations are elaborate.
 Alice followed the rabbit through a tunnel into a room.
 The sea krait is a unique species.
 Today people value quantity of info over quality of info.
 Facts about the American bison

Page 351:

1st: Background info on Whitney and his invention
 2nd: Other inventions of Whitney's
 3rd: Impact of Whitney's invention
 Whole: Whitney invented the cotton gin and other machines that positively impacted people

Page 352:

1st: College and Uni are not the same thing despite how we typically treat them.
 2nd: Description of colleges
 3rd: Description of universities
 4th: How the definition of college has changed over time
 Whole: Relationship between colleges and universities

Page 357-359:

No country: Supporting Point, Main Idea, Supporting Point
 There is: Supporting Point, Supporting Point, Main Idea
 The amount: Supporting Point, Supporting Point, Main Idea
 The invention: Main Idea, Supporting Point, Supporting Point
 You may: Main Idea, Supporting Point, Supporting Point

| | | |
|---|---|---|
| The American: Main Idea, Supporting Point, Supporting Point | Page 371: C | |
| Creativity is: Supporting Point, Main Idea, Supporting Point | D | |
| Americans have: Supporting Point, Main Idea, Supporting Point | Page 380: | 3. How does the author feel about using eyewitnesses? Trusts it completely |
| | 1. habitat, African elephant | 4. How does the author feel about using eyewitnesses? Questions the reliability |
| | 2. traffic, metro areas | |
| Page 360-361: | 3. Romeo disappear, Juliet's reaction | Page 389-390: |
| 1. What is a note and how is it used to create music? | 4. None - big picture question | 1. What does "Pere" mean? The person who created it |
| 2. Information about the properties and characteristics of oak trees | 5. desk | 2. What is pasteurization used for? To kill bacteria present |
| 3. Benefits of exercise | 6. food culture, Italy | 3. What is a true comparison of pasteurization techniques? Flash is faster and most common, batch is oldest |
| 4. Goodall's research that showed chimps making tools is forcing us to reconsider what makes something human. | 7. abstract art | 4. What is an inference from the passage? Can't really predict this one, leave for the end |
| 5. The importance of the sword in the legends of King Arthur and how it predicted the rise and fall of the king | 8. ship sinking, Atlantic Ocean | 5. What does "accustomed to" mean? Used to |
| 6. The difference between ridicule and banter | 9. Transcendentalist movement | 6. What is the main purpose? Define pasteurization and explain how it works |
| | 10. green jar | |
| | Page 383: | |
| | 1. BP | |
| | 2. D | |
| | 3. D | |
| | 4. D | |
| | 5. D | |
| | 6. D | |
| Page 362: | Page 384: | |
| Joshua lives in a city that is often cold. | 1. How was New York affected by Mt. Fuji's eruption? | Page 391: |
| Rebecca is Joshua's wife. | 2. What do you think the author will argue about after what he/she stated before? | 1. C |
| Joshua does not like the weather. | 3. As said in the text, what must the slow-burning wood be? | 2. F |
| | 4. According to the text, which of the following things did the Navajo NOT do as a part of their rituals? | 3. C |
| Page 364: | 5. When the author uses the word "beginning" in line 10, what is he/she probably talking about? | 4. H |
| <i>Le Figaro</i> is a newspaper/magazine. | | 5. A |
| The author is proud of the article. | | 6. G |
| The passage takes place in the morning. | | Page 392-393: |
| Page 365: | | 7. C |
| The townspeople think Ishmael is amazing. | | 8. H |
| Herman feels content at the end of the story. | | 9. B |
| | | 10. E |
| | | 11. A |
| | Page 386: | |
| Page 366: | B | Page 396: |
| The home was nice and expensive. | C | 1. Simile |
| The dynamite's purpose was to blow up part of the city in an effort to contain the fire. | B | 2. Simile, Soup is gross |
| The future of English rests in the hands of the youth. | D | 3. Metaphor, shark has sharp teeth |
| | B | 4. Metaphor, father was on edge |
| | D | 5. Metaphor, couldn't wait to get out of class |
| | E | 6. Simile, walked quietly |
| | | 7. Metaphor, new building was tall |
| Page 367: | Page 387: | |
| Marco Polo was from Europe (Italy). | 1. B | Page 398: |
| The discovery of silk made cotton less valuable. | 2. B | 1. Alliteration |
| The Italians characterize their travels as lucky. | | 2. Metaphor |
| Page 370: | Page 388: | 3. Onomatopoeia |
| C | 1. How does the author feel about shopping? Doesn't like it | 4. Simile |
| A | 2. How does the author feel about shopping? Loves it, finds it hard to control his/herself | 5. Repetition |
| | | 6. Personification |
| | | 7. Alliteration |
| | | 8. Personification |

9. Onomatopoeia
10. Repetition
11. Simile
12. Metaphor
13. Metaphor
14. Personification

Page 399:

C
She looked beautiful
Personification, simile

Page 402:

1. C
2. H
3. C
4. F

Page 404-405:

1. B
2. H
3. D
4. F
5. C
6. G
7. A
8. C

Page 407-408:

1. A
2. G
3. D
4. E
5. B
6. H
7. B
8. F

Page 412-413:

1. B
2. F
3. D
4. G
5. B
6. H

Page 414-415:

1. D
2. H
3. B
4. F
5. B
6. G

Page 417:

1. B
2. F
3. D
4. F

5. D

Page 419:

1. C
2. E
3. C
4. H
5. A

Page 421-422:

1. D
2. E
3. B
4. F
5. C
6. E

Page 424:

1. B
2. G
3. B
4. F
5. A
6. F

Page 426-427:

1. C
2. E
3. D
4. F
5. D
6. F
7. C

Page 429-430:

1. A
2. F
3. D
4. E
5. B
6. H
7. B

Page 432-433:

1. B
2. F
3. D
4. H
5. C
6. G

Page 435-436:

1. D
2. F
3. A
4. G
5. C
6. E

Page 438-439:

1. A
2. G
3. B
4. E
5. D
6. F

Page 441-442:

1. B
2. F
3. C
4. E
5. D

Page 443-444:

1. A
2. G
3. D
4. G
5. D

Page 446:

1. C
2. E
3. B
4. E
5. A

Page 449-450:

1. D
2. G
3. A
4. E
5. D
6. F
7. D

Page 451-452:

1. C
2. F
3. A
4. H
5. A

Page 453-454:

1. D
2. F
3. A
4. H
5. C

Page 455-456:

1. C
2. H
3. A
4. G
5. B

Page 457-458:

1. A
2. H
3. D
4. F
5. C

Page 460-461:

1. D
2. E
3. B
4. G
5. B
6. F

Page 463-464:

1. D
2. F
3. C
4. F
5. B
6. H

Page 465-466:

1. D
2. G
3. C
4. H
5. B
6. H
7. C
8. F

Page 468:

1. A
2. H
3. B
4. H
5. B

Page 470-471:

1. C
2. G
3. A
4. F
5. C
6. H
7. A

Page 473:

1. B
2. F
3. B
4. H
5. B
6. G

Page 475-476:

1. D

2. E
3. C
4. H
5. A
6. H

Page 478-479:

1. D
2. E
3. C
4. H
5. B
6. G
7. D
8. F

Page 481:

1. C
2. F
3. B
4. G
5. D
6. G

Page 483-484:

1. B
2. H
3. B
4. F
5. D
6. G
7. B

Page 485-486:

1. C
2. F
3. D
4. H
5. B
6. H

Page 488-489:

1. B
2. H
3. B
4. G
5. A
6. G
7. C
8. H
9. B

Page 491-492:

1. A
2. F
3. B
4. H
5. B
6. E

Page 494:

1. A
2. E
3. B
4. F
5. D
6. H

Page 496-497:

1. B
2. G
3. A
4. F
5. A
6. G
7. B

Page 499:

1. B
2. H
3. C
4. F
5. A
6. H

Page 500-501:

1. D
2. H
3. B
4. H
5. A

Page 504:

1. C
2. F
3. C
4. H
5. A

Page 505-506:

1. C
2. H
3. B
4. F
5. D

Page 507-508:

1. C
2. E
3. B
4. G
5. D

Page 510-511:

1. C
2. H
3. A
4. G

5. D
6. E

Page 513-514:

1. B
2. H
3. C
4. G
5. B
6. E
7. D
8. G

Page 516-517:

1. D
2. F
3. C
4. E
5. D
6. G
7. A
8. F

Page 518-519:

1. D
2. G
3. A
4. G
5. A
6. G
7. D
8. E

Revising & Editing:

Page 526:

1. man has one eye, dog has one eye
2. she gave food to her cat, she fed a woman cat food
3. we saw the woman duck down, we saw the duck that belonged to the woman
4. using a telescope I saw an armadillo in the distance, there was an armadillo in the distance that had a telescope
5. rebecca was wearing a yellow hat, the monkey was wearing a yellow hat
6. relatives who are visiting are exhausting me, going to visit relatives is an exhausting thing

Page 527:

Noun: Nouns identify a person, place, thing, or quality
Pronoun: Pronouns replace or substitute for nouns.
Verb: Action words.

Adjective: Adjectives describe nouns & pronouns. They are usually placed just before the words they modify.

Adverb: Adverbs describe verbs, adjectives, and other adverbs.

Preposition: Prepositions indicate the relationship (often spatial) of one word to another.

Conjunction: Conjunctions connect words, phrases, clauses, or sentences.

F-for, A-and, N-nor, B-but, O-or, Y-yet, S-so

Page 530:

1. Did you know that chocolate, a favorite delicacy around the world, is created from the cacao bean?
2. Cacao beans are primarily grown in South and Central America, especially in Mexico and Brazil.
3. The beans grow on little shrubs in tropical areas. These shrubs are actually relatives of North American evergreen trees.
4. In many cases, the cacao bean's potency is enhanced through slow roasting.
5. Although many people associate chocolate with dessert, chocolate is also found in Mexican mole sauce, which is eaten on everything from chicken to vegetables.

Page 531-532:

1. B
2. F
3. A
4. F
5. D
6. H

Page 534:

1. The Netherlands WAS...
 2. The newly elected President, to the dismay of her opponents, HAS argued...
1. are
 2. devours
 3. records
 4. takes
 5. votes
 6. eats

Page 536:

1. ...and her twin brother GRADUATED from high school
2. Richard and Marlas ARE SCHEDULED...
3. ...they ARE looking forward...

4. will be
5. spoke
6. announces
7. chose

Page 537-538:

1. A
2. G
3. B
4. H
5. D
6. F
7. A
8. G

Page 540:

1. Complete
2. Run-on
3. Complete
4. Run-on
5. Incomplete
6. Complete
7. Complete
8. Run-on
9. Incomplete
10. Incomplete

Page 541-542:

1. C
2. F
3. C
4. F
5. D
6. E
7. C
8. H

Page 544:

1. Dressed in an unappealing leather shirt and baggy jeans, he took the microphone...
2. As she walked into the café, Maggie received...
3. No error
4. She served sandwiches on paper plates to the children
5. Eagerly awaiting her party, Gabby hung...

Page 545-546:

1. A
2. F
3. A
4. E
5. A
6. G

Page 548:

Singular 7. D
Singular 8. F
Plural 9. A
Plural 10. H
Singular 11. B
Singular 12. F
Both 13. A
Plural 14. F
Singular 15. C
Plural 16. G
Singular 17. C
Both 18. F
Singular
Singular

1. A
2. F
3. B
4. F
5. D
6. H

Page 580-581:

1. D
2. F
3. A
4. H
5. B

Page 582-583:

1. D
2. H
3. C
4. H
5. B
6. E

Page 584-585:

1. C
2. F
3. A
4. H
5. B

Page 588-593:

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

Page 594-595:

1. D
2. G
3. A
4. F
5. D

Page 549:

1. D
2. F
3. C
4. F

Page 551:

1. ...than Joe is
2. Frank Lloyd Wright's
3. Phyllis Wheatley's work
4. No error
5. Human can
6. More prepared

Page 552:

1. D
2. G
3. C
4. G

Page 554:

1. ...discussing second, and taking
action last.
2. ...and Jimmy has issues with its level
of intensity.
3. ...Dashawn cooked eggs, Ervin fried
bacon, and Djidi made the
pancakes.
4. ...and a used raincoat.
5. ...and the playing of a piano.

Page 555:

1. D
2. G
3. D
4. G

Page 556- 561:

1. D
2. G
3. D
4. F
5. B
6. G

Page 566-568:

1. C
2. H
3. B
4. G
5. D
6. H
7. A
8. H

Page 570-571:

1. A
2. E
3. D
4. F
5. D
6. F
7. D

Page 572-573:

1. D
2. H
3. A
4. H
5. B
6. G
7. D

Page 574-575:

1. A
2. H
3. B
4. G
5. D
6. G

Page 576-577:

1. B
2. H
3. B
4. E
5. C
6. H
7. A

Page 578-579:

Page 596-597:

1. C
2. E
3. D
4. E
5. C
6. G
7. B

Page 598-599:

1. C
2. H
3. A
4. E
5. B
6. F

Mini Test #1:

Page 604-617:

1. D
2. F
3. A
4. G
5. B
6. F
7. D
8. G
9. A
10. G
11. B
12. H
13. A
14. E
15. C
16. F
17. C
18. F
19. B
20. G
21. D
22. G
23. C
24. 40.5
25. 39
26. 744
27. A
28. E
29. A
30. G
31. C
32. F
33. B
34. G
35. C
36. F
37. D
38. E

39. B
40. H
41. C
42. F
43. C
44. F
45. D
46. E
47. D
48. E
49. D
50. F

Mini Test #2:

Page 619-635:

1. D
2. H
3. C
4. H
5. C
6. H
7. B
8. E
9. B
10. H
11. D
12. G
13. B
14. H
15. D
16. E
17. C
18. H
19. B
20. E
21. C
22. G
23. A
24. H
25. 285
26. 9
27. $1/2$ or 2
28. E
29. D
30. G
31. B
32. F
33. C
34. E
35. A
36. G
37. D
38. H
39. A
40. E
41. D
42. G
43. C

44. E
45. C
46. G
47. B
48. F
49. A
50. E
51. B