1. The time from 7AM to 7PM is 12 hours. 396 snakes ÷ 12 hours = 33 snakes banished per hour. **(B)**
2. There are 12 inches in 1 foot. Therefore, we must multiply the length and width of the flag by 12. This gives us dimensions of 36 inches x 60 inches. From here, we multiply 36 by 60 to determine the area of the flag. 36×60=2160. **(D)**
3. There are two sides of the flag that are 36 inches. 36×2=72. There are two sides of the flag that are 60 inches. 60×2=120. If we add these two numbers together, we get the total perimeter of the flag. 120+72=192 inches. **(C)**
4. 336 ×  = 224 boiled potatoes

336 ×  = 84 baked potatoes

224 + 84 = 308

336 – 308 = 28 potatoes remaining **(A)**

1. 373 × 3 = 1119

12 × 4 = 48

1119 + 48 = 1167 leaves **(C)**

1. 7 goes into 262 37 times, dividing perfectly into 259. Since the difference between 262 and 259 is 3, we say there are  remaining. Therefore, the answer is ****. **(B)**
2. The range is the difference between the smallest and largest number in a set. 17-5=12

The mode is the number that occurs most often in a set. 8 occurs twice.

12 + 8 = 20 **(C)**

1. 65 + 59 + 71 + 63 = 258

258 ÷ 4 = 64.5 **(B)**

1. To determine how many different combinations can be made for outfits, multiply the numbers of each clothing item together.

3 tops × 2 pairs of shoes × 2 pairs of pants = 12 outfits **(C)**

1. To divide fractions, multiply the first fraction by the reciprocal of the second fraction.

÷ × = ××= =  **(B)**

1. There are 60 minutes in an hour. 5 hours is 300 minutes. You have 40 minutes out of 60 minutes remaining. This simplifies to  of an hour. Therefore, Hannah has studied St. Patrick’s Cathedral for 5  hours. **(D)**
2. The formula for the volume of a rectangular prism is length×width×height(depth). To solve this problem, multiply 10 by 6 by 5, which equals 300 ft3. **(D)**
3. 150 × .14 = 21 = The amount David gives to his best friend

150 – 21 = 129 = The amount David has left **(B)**

1. Nick must have the first float. Since there is one float between Jessie and Doreen, they must have the second and fourth floats. Doreen must be behind Brian, so she cannot have the second float. Therefore, Jessie has the second float while Doreen has the fourth float. This means that Brian must have the third float. **(C)**
2. By definition, there are 2000 pounds in a ton. So, 2.5 × 2000 = 5000 **(D)**
3. Since 17 has no factors besides 1 and itself, it is prime. Since 17 is not fractional, it is an integer. **(A)**
4. The first four multiple of 9 are: 9, 18, 27, 36

The first four multiple of 12 are: 12, 24, 36, 48

36 is the smallest multiple that 9 and 12 have in common, and is therefore their least common multiple. **(D)**

1. A right angle is equal to 90. Since the cannon is already at 30, it only needs to be tilted 60 more to form a right angle. **(A)**
2. Nick’s Scores: 6.5 + 7 + 5 + 8.5 = 27 27 ÷ 4 = 6.75

Nith’s Scores: 9 + 7.5 + 6 + 5.5 = 28 28 ÷ 4 = 7

7 – 6.75 = 0.25 **(D)**

1. Cost of 3 bowties = 3 × $3.75 = $11.25

Cost of 1 hat = 1 × $7.50 = $7.50

$11.25 + $7.50 = $18.75 **(C)**

1. As we look at the numbers, we see that with each new number, the numerator is being multiplied by 1 and the denominator is being multiplied by 5. To find the next number, we must multiply the numerator by 1 and multiply the denominator by 5. 125×5=625. Therefore, our fraction becomes . **(A)**
2. 18x – 4 = 15x + 32

18x = 15x + 36

3x = 36

X = 12 **(B)**

1. 50 total crowns – 12 4-leaf clover crowns = 38 3-leaf clover crowns

 =  3-leaf clover crowns = 76% **(D)**

1. The answer is an even number. Since the answer is a multiple of 16, we can eliminate 80. We are left with 16, 48 and 64, which are all even multiples of 16. However, 48 is not a factor of 128. 16 is not larger than 64. So, 64 is our answer. **(C)**
2. At 6:00, we have 3 people in line. We add 3 more people at 6:05, 6:10, 6:15, 6:20, 6:25, 6:30, 6:35, 6:40, and 6:45. This adds up to 30 total people in line. **(B)**
3.  is the only fraction less than 1, and is therefore the smallest. To figure out the order of the others, put them all in mixed number form (,,). From here, give all of the fractions a common denominator. The LCD is 30, so we’ll make the denominator 30. This gives us fractions: , , .  is the largest number, 1.7 is second largest,  is the third largest, and  is the smallest. **(D)**
4. V=

V= π(2)3

V=π8

V=π **(C)**

1. There are 3 “A”s, 2 “I”s and 1 “Y” in Saint Patrick’s Day. There are 16 letters in total in the phrase. =  **(D)**
2. Since there are 3 numbers to the right of the decimal in the numbers being multiplied, there are 3 numbers to the right of the decimal in the answer. 7.3×3.14= 22.922 **(C)**
3. There are 30 questions in this test. 30×2013=60390 **(D)**