1. There are 5 pairs of white, 3 pairs of black and 2 pairs of grey socks in a drawer. If four socks are picked at random what is the probability of getting two socks of the same color?
A. 1/5
B. 2/5
C. 3/4
D. 4/5
E. 1

Solution: 12-easy-pieces-or-not-126366.html#p1033919

2. If x is an integer and 9<x^2<99, then what is the value of maximum possible value of x minus minimum possible value of x?
A. 5
B. 6
C. 7
D. 18
E. 20

Solution: 12-easy-pieces-or-not-126366.html#p1033921

3. Fanny and Alexander are 360 miles apart and are traveling in a straight line toward each other at a constant rate of 25 mph and 65 mph respectively, how far apart will they be exactly 1.5 hours before they meet?
A. 25 miles
B. 65 miles
C. 70 miles
D. 90 miles
E. 135 miles

Solution: 12-easy-pieces-or-not-126366.html#p1033924

4. If -3<x<5 and -7<y<9, which of the following represent the range of all possible values of y-x?
A. -4<y-x<4
B. -2<y-x<4
C. -12<y-x<4
D. -12<y-x<12
E. 4<y-x<12

Solution: 12-easy-pieces-or-not-126366.html#p1033925

5. The angles in a triangle are x, 3x, and 5x degrees. If a, b and c are the lengths of the sides opposite to angles x, 3x, and 5x respectively, then which of the following must be true?
I. c>a+b
II. c^2>a^2+b^2
III. c/a/b=10/6/2

A. I only
B. II only
C. III only
D. I and III only
E. II and III only

Solution: 12-easy-pieces-or-not-126366.html#p1033930

6. Anna has 10 marbles: 5 red, 2 blue, 2 green and 1 yellow. She wants to arrange all of them in a row so that no two adjacent marbles are of the same color and the first and the last marbles are of different colors. How many different arrangements are possible?
A. 30
B. 60
C. 120
D. 240
E. 480

Solution: 12-easy-pieces-or-not-126366.html#p1033932

7. After 2/9 of the numbers in a data set A were observed, it turned out that 3/4 of those numbers were non-negative. What fraction of the remaining numbers in set A must be negative so that the total ratio of negative numbers to non-negative numbers be 2 to 1?
A. 11/14
B. 13/18
C. 4/7
D. 3/7
E. 3/14

Solution: 12-easy-pieces-or-not-126366.html#p1033933

8. There are 15 black chips and 5 white chips in a jar. What is the least number of chips we should pick to guarantee that we have 2 chips of the same color?
A. 3
B. 5
C. 6
D. 16
E. 19

Solution: 12-easy-pieces-or-not-126366.html#p1033935

9. Julie is putting M marbles in a row in a repeating pattern: blue, white, red, green, black, yellow, pink. If the row begins with blue marble and ends with red marble, then which of the following could be the value of M?
A. 22
B. 30
C. 38
D. 46
E. 54

Solution: 12-easy-pieces-or-not-126366.html#p1033936

10. If n **is an integer and** $\frac{1}{10^{n+1}}<0.00737<\frac{1}{10^n}$**, then what is the value of n?**
A. 1
B. 2
C. 3
D. 4
E. 5

Solution: 12-easy-pieces-or-not-126366.html#p1033938

11. The numbers {1, 3, 6, 7, 7, 7} are used to form three 2-digit numbers. If the sum of these three numbers is a prime number p, what is the largest possible value of p?
A. 97
B. 151
C. 209
D. 211
E. 219

Solution: 12-easy-pieces-or-not-126366-20.html#p1033939

12. If $-\frac{1}{3}\leq x\leq -\frac{1}{5}$ **and** $-\frac{1}{2}\leq y\leq -\frac{1}{4}$**, what is the least value of** $x^{2*}y$ **possible?**
A. -1/100
B. -1/50
C. -1/36
D. -1/18
E. -1/6

Solution: 12-easy-pieces-or-not-126366-20.html#p1033949