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| 1. A bag holds 6 baseballs and 12 other toys. If one item is drawn from the bag at random, what is the probability that the item is a baseball? 2. 1/7 3. 1/3 4. ½ 5. 2/3 6. 3/7 | 1. A basket contains 6 chocolate and 4 mint candies. If two candies are drawn at random, what is the probability that both candies will be chocolate? 2. 2/3 3. 3/5 4. 5/9 5. 1/3 6. 2/15 |
| 1. A basket contains 58 red eggs, 78 green eggs, and the rest are blue. If the probability of choosing a blue egg from this basket at random is 1/5, how many blue eggs are in the basket? 2. 34 3. 56 4. 78 5. 102 6. 152 | 1. Kimberly wrote 9 papers for her psychology class. She wants to put 7 papers in her portfolio and is deciding on what order to put them in. How many different ways can Kimberly arrange her papers? 2. 420 3. 5,040 4. 25,920 5. 51,840 6. 181,440 |
| 1. In a three-digit number, all of the digits are different and the units and hundreds digits are prime. How many possible numbers can be made? 2. 64 3. 96 4. 128 5. 240 6. 504 | 1. There are 5 swimmers in a race. If the first place finisher wins a gold medal, the second place finisher wins a silver medal and the third place finisher wins a bronze medal, how many different permutations are possible for the medal winners? 2. 5 3. 12 4. 20 5. 50 6. 60 |
| 1. If a store sells a shirt for h dollars, how much would that shirt cost if it was marked down by q%? 2. hq 3. 1/4hq 4. h(1-(q/100) 5. q(1-(h/100) 6. 2hq | 1. If w hats cost z dollars, then how many hats could you buy with $100? 2. 100/w 3. 100wz 4. 100w/z 5. 100z/w 6. wz |
| 1. If the sum of three consecutive odd integers is p, then in terms of p, what is the greatest of the three integers? 2. (p-6)/3 3. (p-3)/3 4. p/3 5. (p+3)/3 6. (p+6)/3 | 1. Andrew flies 40 miles in x hours. If he must fly y miles at the same speed, in terms of x and y, how many hours will the trip take? 2. x/(40y) 3. 40/(xy) 4. 40xy 5. (40y)/x 6. (xy)/40 |
| 1. Marc is half as old as Tony and three times as old as Ben. If the sum of their ages is 40, who old is Marc? 2. 3 3. 6 4. 12 5. 18 6. 24 | 1. Chef Emeril has equal amounts flour, sugar and salt. He mad pretzels by mixing 1/3 of the flour, ½ of the sugar and ¼ of salt. If he made 52 pounds of pretzels, how many pounds of sugar did he have to start? 2. 45 3. 48 4. 50 5. 52 6. 56 |
| 1. Serena gives her butler a statin suit and her driver a diamond necklace. If the suit is worth one-fifth of what the necklace is worth, and if the two items together are worth $4800, how much is the necklace worth? 2. $800 3. $960 4. $3840 5. $4000 6. $4250 | 1. Jason has twice as many baseballs as Matt. If Jason gives Matt three baseballs, Jason would have one baseball less than Matt. How many baseballs does Jason currently have? 2. 4 3. 5 4. 7 5. 8 6. 10 |
| 1. A private plane pilot flies her plane for two days. The distance she flew on the first day was 150km less than twice the distance she flew on the second day. If she flew a total of 600km, what was the distance she flew, in km that she flew on the second day? 2. 250 3. 275 4. 350 5. 375 6. 450 | 1. If (q-6)(q-6)=169, then one possible value of q is? 2. 7 3. 19 4. 49 |