UNIT 15 EXERCISES 1-5

PERCENT

2004A 1. Alicia earns \$20 per hour, of which 1.45% is deducted to pay local taxes. How many cents per hour of Alicia's wages are used to pay local taxes?

(A) 0.0029   (B) 0.029   (C) 0.29   (D) 2.9   (E) 29

2005A 1. Two is 10% of x and 20% of y. What is $x - y$?

(A) 1   (B) 2   (C) 5   (D) 10   (E) 20

2007A 1. One ticket to a show costs \$20 at full price. Susan buys 4 tickets using a coupon that gives her a 25% discount. Pam buys 5 tickets using a coupon that gives her a 30% discount. How many more dollars does Pam pay than Susan?

(A) 2   (B) 5   (C) 10   (D) 15   (E) 20

2010B   1. Makayla attended two meetings during her 9-hour work day. The first meeting took 45 minutes and the second meeting took twice as long. What percent of her work day was spent attending meetings?

(A) 15   (B) 20   (C) 25   (D) 30   (E) 35

2018A   1. A large urn contains 100 balls, of which 36% are red and the rest are blue. How many of the blue balls must be removed so that the percentage of red balls in the urn will be 72%? (No red balls are to be removed.)

(A) 28   (B) 32   (C) 36   (D) 50   (E) 64

2005B   2. A positive number x has the property that $x\%$ of x is 4. What is x?

(A) 2   (B) 4   (C) 10   (D) 20   (E) 40

2000   3. Each day, Jenny ate 20% of the jellybeans that were in her jar at the beginning of that day. At the end of second day, 32 remained. How many jellybeans were in the jar originally?

(A) 40   (B) 50   (C) 55   (D) 60   (E) 75

2001   3. The state income tax where Kristin lives is levied at the rate of $p\%$ of the first $28000 of annual income plus $(p+2)\%$ of any amount above $28000. Kristin noticed that the state income tax she paid amounted to $(p+0.25)\%$ of her annual income. What was her annual income?

(A) $28000   (B) $32000   (C) $35000   (D) $42000   (E) $56000

2009B

3. Twenty percent less than 60 is one-third more than what number?

(A) 16   (B) 30   (C) 32   (D) 36   (E) 48

2013A

2002A 4. Find the degree measure of an angle whose complement is 25% of its supplement.

(A) 48   (B) 60   (C) 75   (D) 120   (E) 150

2005B 4. At the beginning of the school year, Lisa's goal was to earn an A on at least 80% of her 50 quizzes for the year. She earned an A on 22 of the first 30 quizzes. If she is to achieve her goal, on at most how many of the remaining quizzes can she earn a grade lower than an A?

(A) 1   (B) 2   (C) 3   (D) 4   (E) 5

2012B

1999

5. The marked price of a book was 30% less than the suggested retail price. Alice purchased the book for half the marked price at a Fiftieth Anniversary sale. What percent of the suggested retail price did Alice pay?

(A) 25%   (B) 30%   (C) 35%   (D) 60%   (E) 65%

2007A

5. Last year Mr. John Q. Public received an inheritance. He paid 20% in federal taxes on the inheritance, and paid 10% of what he had left in state taxes. He paid a total of $10,500 for both taxes. How many dollars was the inheritance?

(A) 30,000   (B) 32,500   (C) 35,000   (D) 37,500   (E) 40,000

2011A

5. Last summer 30% of the birds living on Town Lake were geese, 25% were swans, 10% were herons, and 35% were ducks. What percent of the birds that were not swans were geese?

(A) 20   (B) 30   (C) 40   (D) 50   (E) 60

2013A

2015B

5. The Tigers beat the Sharks 2 out of the first 3 times they played. They then played N more times, and the Sharks ended up winning at least 95% of all the games played. What is the minimum possible value for N?

(A) 35   (B) 37   (C) 39   (D) 41   (E) 43