

## UNIT 16 EXERCISES 1-5

## FRACTIONS

- 2014B 2. Orvin went to the store with just enough money to buy 30 balloons. When he arrived he discovered that the store had a special sale on balloons: buy 1 balloon at the regular price and get a second at  $\frac{1}{3}$  off the regular price. What is the greatest number of balloons Orvin could buy?

(A) 33      (B) 34      (C) 36      (D) 38      (E) 39

1999

3. The number halfway between  $\frac{1}{8}$  and  $\frac{1}{10}$  is

(A)  $\frac{1}{80}$       (B)  $\frac{1}{40}$       (C)  $\frac{1}{18}$       (D)  $\frac{1}{9}$       (E)  $\frac{9}{80}$

- 2005B 3. Brianna is using part of the money she earned on her weekend job to buy several equally-priced CDs. She used one fifth of her money to buy one third of the CDs. What fraction of her money will she have left after she buys all the CDs?

(A)  $\frac{1}{5}$       (B)  $\frac{1}{3}$       (C)  $\frac{2}{5}$       (D)  $\frac{2}{3}$       (E)  $\frac{4}{5}$

- 2008A 3. Suppose that  $\frac{2}{3}$  of 10 bananas are worth as much as 8 oranges. How many oranges are worth as much as  $\frac{1}{2}$  of 5 bananas?
- (A) 2      (B)  $\frac{5}{2}$       (C) 3      (D)  $\frac{7}{2}$       (E) 4
- 2009A 3. What number is one third of the way from  $\frac{1}{4}$  to  $\frac{3}{4}$ ?
- (A)  $\frac{1}{3}$       (B)  $\frac{5}{12}$       (C)  $\frac{1}{2}$       (D)  $\frac{7}{12}$       (E)  $\frac{2}{3}$
- 2002B 4. Let  $n$  be a positive integer such that  $\frac{1}{2} + \frac{1}{3} + \frac{1}{7} + \frac{1}{n}$  is an integer. Which of the following statements is **not** true:
- (A) 2 divides  $n$       (B) 3 divides  $n$       (C) 6 divides  $n$       (D) 7 divides  $n$   
(E)  $n > 84$
- 2012A 4. In a bag of marbles,  $\frac{3}{5}$  of the marbles are blue and the rest are red. If the number of red marbles is doubled and the number of blue marbles stays the same, what fraction of the marbles will be red?
- (A)  $\frac{2}{5}$       (B)  $\frac{3}{7}$       (C)  $\frac{4}{7}$       (D)  $\frac{3}{5}$       (E)  $\frac{4}{5}$
- 2006A 5. Doug and Dave shared a pizza with 8 equally-sized slices. Doug wanted a plain pizza, but Dave wanted anchovies on half of the pizza. The cost of a plain pizza was \$8, and there was an additional cost of \$2 for putting anchovies on one half. Dave ate all the slices of anchovy pizza and one plain slice. Doug ate the remainder. Each then paid for what he had eaten. How many more dollars did Dave pay than Doug?
- (A) 1      (B) 2      (C) 3      (D) 4      (E) 5

