1

What is the thousandths digit of the decimal p ?

(1) p is equivalent to the fraction 4/7.
(2) The units digit of 100p is 2.

2

In the decimal representation of x, where 0 < x < 1, is the tenths digit of x nonzero?

(1) 16x is an integer.
(2) 8x is an integer.

3

If n is an integer, what is the units digit of x?

(1) x = (25^2)/(10^n)

(2) n^2 = 1

4

If A=0.abc, where a, b, and c are digits of A, is A greater than 2/3?

(1) a+b>14
(2) b+c>15

5

If Pool Y currently contains more water than Pool X, and if Pool X is currently filled to 2/7 of its capacity, what percent of the water currently in Pool Y needs to be transferred to Pool X if Pool X and Pool Y are to have equal volumes of water?

(1) If all the water currently in Pool Y were transferred to Pool X, Pool X would be filled to 6/7 of its capacity.

(2) Pool X has a capacity of 14,000 gallons.

6

If n is one of the numbers in $\frac{1}{3}, \frac{3}{16}, \frac{4}{7}, \frac{3}{5}$ then what is the value of n?

(1) $\frac{5}{16}<n<\frac{7}{12}$

(2) $\frac{7}{13}<n<\frac{19}{33}$

7

At the end of 2004, a certain farm had 24 hens, 12 cows, 30 sheep, and 14 pigs. By the end of 2005, 22 new animals — each either a hen, cow, sheep or pig — were brought to the farm. No animals left the farm. How many pigs were there on the farm at the end of 2005?

(1) The ratio of cows to pigs and the ratio of hens to sheep were the same at the end of 2004 and 2005.
(2) The number of sheep increased by 1/6 from the end of 2004 to the end of 2005