

Problem Solving Questions

1. A certain company sells tea in loose leaf and bagged form, and in five flavors: Darjeeling, earl grey, chamomile, peppermint, and orange pekoe. The company packages the tea in boxes that contain either 8 ounces of tea of the same flavor and the same form, or 8 ounces of tea of 4 different flavors and the same form. If the order in which the flavors are packed does not matter, how many different types of packages are possible?

- (A) 12
- (B) 15
- (C) 20
- (D) 25
- (E) 30

[\[+\] See the Answer](#)

2. Karen sold her house at a loss of 25 percent of the price that she originally paid for the house, and then bought another house at a price of 30 percent less than the price she originally paid for her first house. If she sold the first house for \$225,000, what was her net gain, in dollars, for the two transactions?

- (A) \$15,000
- (B) \$25,000
- (C) \$60,000
- (D) \$75,000
- (E) \$90,000

Sample Data Sufficiency Questions

1. In a certain company, at least 200 people own manual transmission vehicles. If 12 percent of the people who own manual transmission vehicles also own automatic transmission vehicles, do more people own

automatic transmission vehicles than own manual transmission vehicles?

(1) 5 percent of the people who own an automatic transmissions vehicle also own a manual transmission vehicle.

(2) 15 people own both an automatic transmission vehicle and a manual transmission vehicle.

(A) Statement (1) ALONE is sufficient, but statement (2) alone is not sufficient.

(B) Statement (2) ALONE is sufficient, but statement (1) alone is not sufficient.

(C) BOTH statements TOGETHER are sufficient, but NEITHER statement ALONE is sufficient.

(D) EACH Statement ALONE is sufficient.

(E) Statements (1) and (2) TOGETHER are NOT sufficient to answer the question asked, and additional data are needed.

2. What is the value of $x/2$?

(1) x is $1/5$ less than $9/10$

(2) x is between $2/5$ and $4/5$

(A) Statement (1) ALONE is sufficient, but statement (2) alone is not sufficient.

(B) Statement (2) ALONE is sufficient, but statement (1) alone is not sufficient.

(C) BOTH statements TOGETHER are sufficient, but NEITHER statement ALONE is sufficient.

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Question 1: A certain company sells tea in loose leaf and bagged form, and in five flavors: Darjeeling, Earl Grey, chamomile, peppermint, and orange pekoe. The company packages the tea in boxes that contain either 8 ounces of tea of the same flavor and the same form, or 8 ounces of tea of 4 different flavors and the same form. If the order in which the flavors are packed does not matter, how many different types of packages are possible?

- A. 12
- B. 15
- C. 20
- D. 25
- E. 30

Question 2: Karen sold her house at a loss of 25 percent of the price that she originally paid for the house and then bought another house at 30 percent less than the price she originally paid for her first house. If she sold the first house for \$225,000, what was her net gain, in dollars, for the two transactions?

- A. \$15,000
- B. \$25,000
- C. \$60,000
- D. \$75,000
- E. \$90,000

Question 4: What is the value of $x/2$?

1. x is $1/5$ less than $9/10$
2. x is between $2/5$ and $4/5$ A. Statement (1) ALONE is sufficient, but statement (2) alone is not sufficient.

B. Statement (2) ALONE is sufficient, but statement (1) alone is not sufficient.

C. BOTH statements TOGETHER are sufficient, but NEITHER statement ALONE is sufficient.

D. EACH Statement ALONE is sufficient.

E. Statements (1) and (2) TOGETHER are NOT sufficient to answer the question asked, and additional data are needed.

A grocery store purchased crates of 40 oranges each for \$5.00 per crate and then sold each orange for \$0.20. What was the store's gross profit on each crate of oranges?

- (A) \$3.00
- (B) \$6.00
- (C) \$8.00
- (D) \$10.00
- (E) \$13.00

The product P of two prime numbers is between 9 and 55. If one of the prime numbers is greater than 2 but less than 6 and the other is greater than 13 but less than 25, then $P =$

- A. 15
- B. 33
- C. 34
- D. 46
- E. 51

If

$$a=7$$

$$b=7 \text{ and}$$

$$b=-7$$

$b=-7$, what is the value of

$$2a-2b+$$

b

2

$$2^{\diamond} - 2^{\diamond} + \diamond 2^{\diamond} ?$$

- (A) -49
- (B) 21
- (C) 49
- (D) 63
- (E) 77