

**GRADE SEVEN-CONTENT STANDARD #7, 9**  
**ACTIVITY D**

Permission Granted

**WHAT'S THE POINT? (E)**

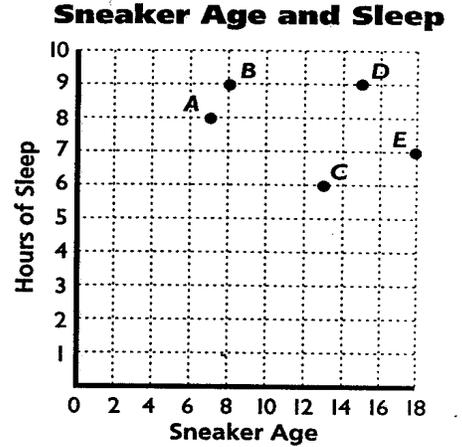
The scatter plot shows the age of sneakers in months and the average number of hours of sleep per night for five students.

**Clues**

- a. Anne sleeps one fewer hour each night than Jean.
- b. The age of Ted's sneakers equals the total age of Sue's and of John's sneakers.
- c. Jean's sneakers are two months more than twice the age of Sue's sneakers.

Tell which point represents which person.

1. A is \_\_\_\_\_
2. B is \_\_\_\_\_
3. C is \_\_\_\_\_
4. D is \_\_\_\_\_
5. E is \_\_\_\_\_



Name.....

**WHAT'S THE POINT? (F)**

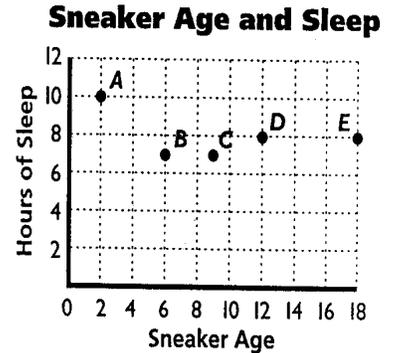
The scatter plot shows the age of sneakers in months and the average number of hours of sleep per night for five students.

**Clues**

- a. The age of Jerry's sneakers is the least common multiple of the ages of Leslie's and of Brenda's sneakers.
- b. Chuck sleeps 7 hours more each week than Brenda and 14 hours fewer than Todd.
- c. Brenda's sneakers are 4.5 times the age of Todd's sneakers.

Tell which point represents which person.

1. A is \_\_\_\_\_
2. B is \_\_\_\_\_
3. C is \_\_\_\_\_
4. D is \_\_\_\_\_
5. E is \_\_\_\_\_



Name.....

[Source: [Groundworks Algebra Puzzles and Problems - Grade 7](#), Creative Publications, Inc.]

### WHAT'S THE POINT? (E)

#### Solutions

**Clue b** Since the age of Ted's sneakers is the sum of the ages of Sue's and of John's sneakers, the only possibility is that Ted's sneakers are 15 months old. Point D represents him. 15 is the sum of 7 and 8. Points A and B represent Sue and John.

**Clue a** The only 2 points left are C and E. This clue names the other 2 students. Since Anne sleeps 1 fewer hour per night than Jean, Point C represents Anne; Point E represents Jean.

**Clue c** Jean's sneakers are 18 months old. Since they are 2 months more than twice the age of Sue's sneakers, and Sue is either A or B, compare 18 months to 7 months and to 8 months. Since  $18 = 2 \times 8 + 2$ , Point B represents Sue. That leaves Point A to represent John.

1. A is John.
2. B is Sue.
3. C is Anne.
4. D is Ted.
5. E is Jean.

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### WHAT'S THE POINT? (F)

#### Solutions

**Clue c** Brenda's sneakers are 4.5 times the age of Todd's sneakers. Only Points C and A are related in this way. So Point C represents Brenda, and A represents Todd;  $4.5 \times 2 = 9$ .

**Clue b** Chuck sleeps 1 hour more each night than Brenda. Since Point C represents Brenda who sleeps 7 hours per night, Chuck must sleep 8 hours per night; Point D or E must represent him. Chuck sleeps 2 fewer hours per night than Todd, who must sleep 10 hours per night.

**Clue a** The age of Jerry's sneakers is the LCM of the ages of Brenda's and of Leslie's sneakers. Brenda's sneakers are 9 months old, Jerry's sneakers must be 18 months old. Point E represents Jerry. That means Leslie's sneakers are 6 months old; Point B represents her. Since Point E represents Jerry, D must represent Chuck.

1. A is Todd.
2. B is Leslie.
3. C is Brenda.
4. D is Chuck.
5. E is Jerry.