Mathematics sample questions

What does N_2 equal in this sequence?

$$17, 25, 32, 38, 43, N_1, N_2$$

- A. 47
- B. 50
- C. 51
- D. 59

The probability of having a male child is 50 percent. A couple now has two children, both of whom are male. What is the probability that the couple's third child will be male?

- A. 0.50
- B. 1.00
- C. 0.25
- D. 0.125

Solve for x:

$$2x - 8 \geq 5x - 2$$

- A. $x \leq -2$
- B. $x \geq -2$
- C. $x \geq 2$
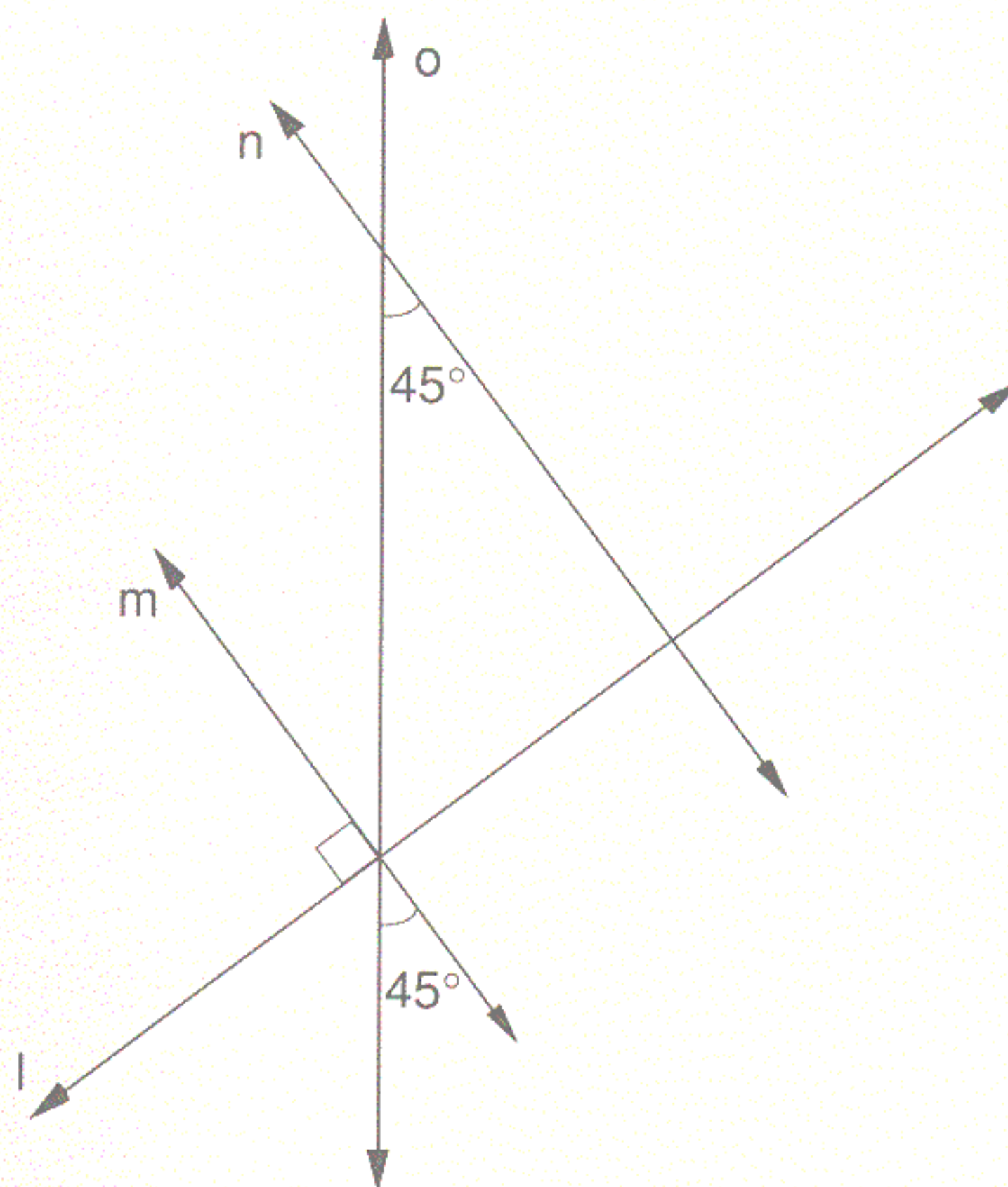- D. $x \geq \frac{10}{7}$

Simplify:

$$3 - [4 - (3^2 - 2 \cdot 5)]$$

- A. 0
- B. −2
- C. 18
- D. 34

If a study reveals that 92% of all men over the age of 60 have been responsible for at least one automobile accident, which conclusion could be drawn?

- A. About 8% of auto accidents are caused by women over the age of 60.
- B. Bill, who is 62 years old, has a 92% chance of causing an accident every time he drives.
- C. Approximately 92% of all traffic accidents are caused by men over the age of 60.
- D. There is a 92% chance that Daryl, a 65-year-old driver, has caused a traffic accident in the past.

Use the graph below to answer the question.

Which lines are perpendicular?

- A. l and n
- B. l and o
- C. m and n
- D. m and o