

What is the next term of the sequence?

1. $1, 3, 5, 8, 11, 15, 19, 24, \dots$

2. $\frac{1}{2}, \frac{2}{6}, \frac{3}{18}, \frac{4}{54}, \dots$

3. $-5, 5, -6, 6, -7, 7, -8, \dots$

What is a counterexample for the following conjecture?

4. All states in the United States share a border with another state.

5. All vehicles on the highway have exactly four wheels.

Identify the hypotheses and conclusion of the given statement.

6. If pigs had wings, they could fly.

Hypotheses _____

Conclusion _____

7. If a movie is a comedy, then it is funny.

Hypotheses _____

Conclusion _____

Write the inverse, converse and contrapositive of the given conditional statement.

8. If you make an insurance claim, then your rates will go up.

Inverse _____

Converse _____

Contrapositive _____

9. If a person is a banjo player, then the person is a musician.

Inverse _____

Converse _____

Contrapositive _____