

Do page 2.05 as a warm-up....

**More Related Statements**

For each implication, write the converse, inverse, and contrapositive. Indicate whether each new statement is true or false.

1. Implication: If I live in Sacramento, then I live in California.

Converse: \_\_\_\_\_

Inverse: \_\_\_\_\_

Contrapositive: \_\_\_\_\_

2. Implication: If a number is positive, then it is greater than 6.

Converse: \_\_\_\_\_

Inverse: \_\_\_\_\_

Contrapositive: \_\_\_\_\_

3. Implication: If a figure is a triangle, then it is a polygon.

Converse: \_\_\_\_\_

Inverse: \_\_\_\_\_

Contrapositive: \_\_\_\_\_

4. Write the converse of: If the moon is full, the vampires are out.

5. Write the contrapositive of: If a giraffe has a sore throat, then gargling doesn't help much.

6. Write the inverse of: If we've been receiving signals from Jupiter, it may not be wise to go there.

7. Write the converse of: You cannot comprehend geometry if you do not know how to reason deductively. (Carefull!!!)

Geometry S1 Week 6 Monday      Cool-down.....

1. Identify the type of reasoning as inductive or deductive. (I or D)

If a number less than 3 is 40 then the number is 43.

2. Write the inverse of:

**If I don't eat ice cream, then I don't get a stomach ache.**

3. Write the contrapositive of:

**If it rains, then the cat wants in the house.**

4. Write the converse of:

**If it is Wednesday, then school gets out at 2:16 p.m.**

5. Use inductive reasoning reasoning to fill in the pattern.

a. 1, 1, 2, 3, 5, 8, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

b. 810, 270, 90, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

6. Find the solution to the system of equations.

$$-4x + 9y = 9$$

$$x - 3y = -6$$

**Geometry S1 week 6 Tuesday**

**Warm-up**

- 1. Find the area of an equilateral triangle with sides equal to 14 feet.**
  
- 2. Write the inverse of:  
If it rains, then the cat wants in the house.**
  
- 3. Write the contrapositive of:  
If it is Wednesday, then school gets out at 2:16 p.m.**
  
- 4. Write the converse of:  
If I sleep until noon, then it is Saturday.**
  
- 5. If a segment has a midpoint of (-3,4) and one other endpoint of ( 6, -1), find the other endpoint.**
  
- 6. Write a counterexample to show that the following conditional statement is false.  
If  $x^2 = 100$ , then  $x = 10$ .**
  
- 7. Multiply:  $(2x - 3)^2$**

## Week 6 Block Day Warm-up

1 The \_\_\_\_\_ negates both the hypothesis and the conclusion of the conditional statement.

- A Converse
- B Inverse
- C Contrapositive
- D Biconditional

2 The \_\_\_\_\_ switches the hypothesis and conclusion of the conditional statement.

- A Converse
- B Inverse
- C Contrapositive
- D Biconditional

3 What is the contrapositive of the following conditional statement:

If I learn from my formative assessments, then I will earn a higher grade in geometry.

- A If I do not learn from my formative assessments, then I will not earn a higher grade in geometry.
- B If I earn a higher grade in geometry, then I learn from my formative assessments.
- C I will learn from my formative assessments if and only if I earn a higher grade in geometry.
- D If I do not earn a higher grade in geometry, then I did not learn from my formative assessments.

4 Identify the type of reasoning as inductive or deductive (I or D).

I noticed that a Henry turned around to flirt during the warm-up Monday, Tuesday, and Block Day. I conclude that Henry flirts during warm-ups.

## Week 6 Block Day Warm-up

- 5 Identify the type of reasoning as inductive or deductive (I or D).

Dillon is one year old. His sister Lily concludes that Dillon will start kindergarten in four years.

- 6 Identify the type of reasoning as inductive or deductive (I or D).

If twice a number less five is one then the number is three.

- 7 Write the inverse of the following conditional statement.

If I text during class, then my teacher will take my phone away.

- 8 Write the contrapositive of the following conditional statement.

If I stay up late, then it is Saturday.

## Week 6 Block Day Warm-up

9 Write the converse of the following conditional statement.

If I sleep late, then I'm happy.

### Geometry S1 Week 6 Friday Warm-up

**Find a pattern for each sequence. Use the pattern to show the next two terms.**

1. 5, 11, 18, 26, ...

2. A, B, D, E, G, H, ...

3. -3, 6, -12, 24, -48, ...

4. 1, 5, 30, 210, 1680, ...

**Find one counterexample to show that each conjecture is false.**

5. The sum of two integers is always positive.

6. The product of two mixed numbers is never a whole number.

7. All four-sided figures are rectangles.

**Factor completely.**

8.  $x^2 + 7x - 8$

9.  $10x^2 - 28x + 16$