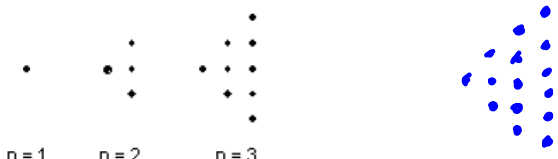
Review 2-1/2-4

1. The first three members of a sequence are shown. How many dots are in the fourth member of the sequence?



1 +3 4 +5 9 +7 16 n = 4

2. Write the next two numbers in the pattern. Describe the pattern.

2, 10, 50, 250, 1250, 6250 Describe: multiply by 5

×5

3. Write the next two numbers in the pattern. Describe the pattern.

1, 3, 6, 10, 15, 21 Describe: _____

+2 +3 +4 +5 +6

4. Show the conjecture is false by finding a counterexample.

If the product of two numbers is positive, then the two numbers must be positive.

x (-1)(-2) = 2

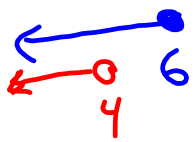
5. Show the conjecture is false by finding a counterexample.

* T F

If $x \leq 6$, then $x < 4$.

$6 \leq 6$ $6 \not< 4$ 6 4.1 5

4



6. Write the following statement as a conditional: All football players have a helmet.

If you are a football player then you have a helmet.

7. Write the following statement as a conditional: The measure of a right angle is 90°.

If an angle is a right angle then its measure is 90°.

8. Write the following statements as a biconditional: If an angle is acute, then its measure is $0° < m < 90°$. If an angles measure is $0° < m < 90°$, then it is an acute angle.

an angle is acute if and only if its measure is $0° < m < 90°$

9. If a polygon is a hexagon, then it has six sides. (T or F)

converse: If it's has 6 sides, then the polygon is a hex. (T or F)

inverse: If a polygon is not a hexagon, then it doesn't have 6 sides (T or F)

contrapositve: if a polygon dosn't have 6 sides, then it is not a hexagon (T or F)

10. If $x + 3 > 7$, then $x = 8$. (T or F)

converse: _____ (T or F)

inverse: _____ (T or F)

contrapositve: _____ (T or F)

11. Make a valid conclusion in the situation.

If $x > 5$, then $x + 7 > 11$. The value of x is 8.

P q P

$x + 7 > 11$

12. Make a valid conclusion in the situation.

If the game goes into overtime, then Joe will get home late. The game went into overtime.

P q P

Joe gets home late.

13. Make a valid conclusion in the situation.

If the game goes into overtime, then Joe will get home late. Joe got home late.

P q q

No Conclusion

14. Make a valid conclusion in the situation.

If you run cross country, then you get exercise. If you get exercise, then you will be healthy.

P q q r

If you run cross country then you will be healthy.

15. Make a valid conclusion in the situation.

If $y = 0$, then $2y = 0$. If $2y = 0$, then $2y - 5 = -5$.

P q q r

If $y = 0$ then $2y - 5 = -5$