

Name: _____

Date: _____

Topic: _____

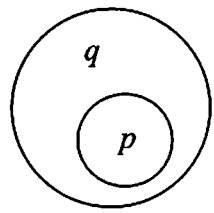
Class: _____

Main Ideas/Questions | **Notes/Examples**

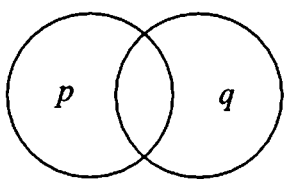
VENN DIAGRAMS

Venn diagrams are a useful way of to show relationships.

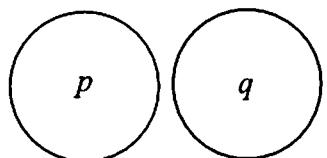
TYPES OF VENN DIAGRAMS



All elements of p are elements of q .



Some elements of p are elements of q .



There is no relationship between p and q .

Draw a Venn Diagram to represent each statement.

1. Some students who take chorus also take band.

Chorus Band

2. No perfect squares are prime numbers.

Perf Sq Prime #

3. Numbers divisible by 6 are always divisible by 3.

Divisible by 3 Divisible by 6

4. Every natural number is a whole number.

Whole #s Natural #s

5. Some vertical angles are complementary.

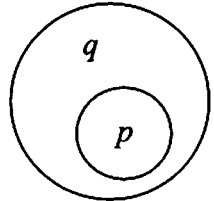
Vertical \angle s Complementary \angle s

6. Irrational numbers are never rational numbers.

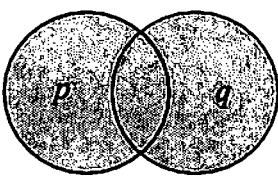
Irrat #s Rat #s

VENN DIAGRAMS & Logic

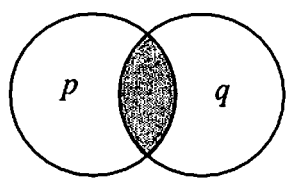
Describe each diagram with a conditional or compound statement.



$p \rightarrow q$



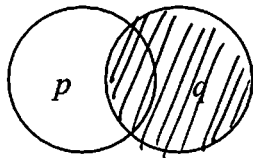
$p \vee q$



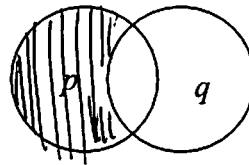
$p \wedge q$

Shade the indicated region on the Venn diagram.

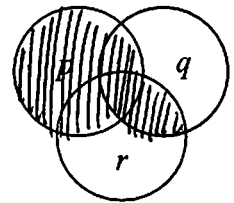
7. q



8. $p \wedge \sim q$

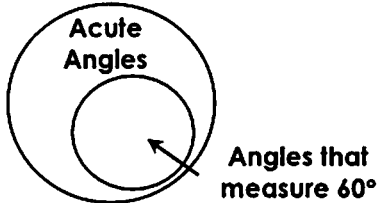


9. $p \vee (q \wedge r)$



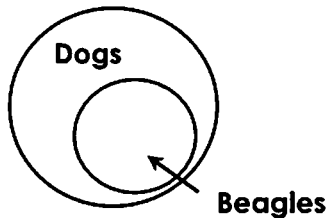
Describe each diagram using a conditional or compound statement.

10.



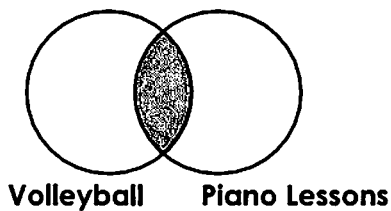
If an angle measures 60° , then it is an acute angle.

11.



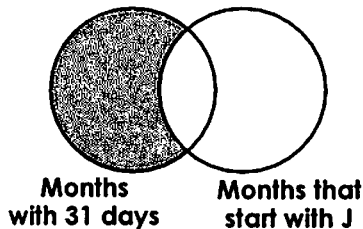
If an animal is a beagle, then it is a dog.

12.



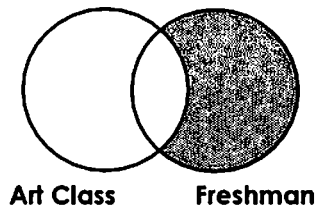
Some people play volleyball and take piano lessons.

13.



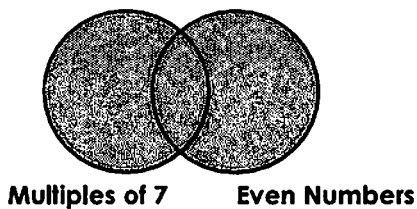
There are months with 31 days and do not start with J.

14.



Some are freshmen and do not take art class.

15.



There are numbers that are multiples of 7 or even numbers.