

10-1-13  
5<sup>th</sup> Geo

Converse  
Inverse  
Contrapositive

① Give the inverse of

$$\sim p \rightarrow q$$
$$p \rightarrow \sim q$$

② Give the contrapositive of

$$p \rightarrow \sim q$$
$$q \rightarrow \sim p$$

③ Give contrapositive of

All dogs are Smelly.

If it is a dog, then its smelly.

Contrapositive is

If it is not smelly, then it is  
NOT a dog.

Let  $p$ : you can't win

$q$ : you are 80

$$\sim q \rightarrow p$$

If you are not 80, then you can't

Properties

① If  $\angle A + 30^\circ = \angle B$ , Subtract  
then  $\angle A = \angle B - 30^\circ$

② If  $\angle A = \angle B$ , then Symmetric  
 $\angle B = \angle A$ .

③ If  $\angle A = \angle B$  and Transitive  
 $\angle B = \angle C$ , then  
 $\angle A = \angle C$ .

④  $\angle A = \angle A$  Reflexive

⑤ If  $AB = CD$ , then Addition  
 $AB + CD = 2CD$   
( $CD + CD$ )

Give area of figures below.



$$A = \pi r^2$$
$$= \pi \cdot 3^2$$
$$= 9\pi \text{ (exact)}$$

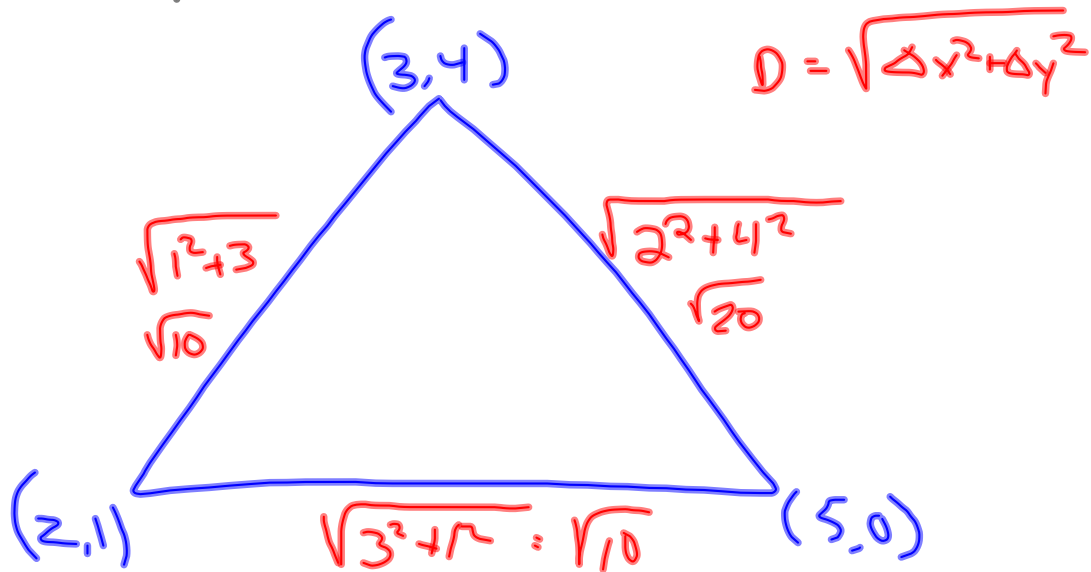


$$A = l \cdot w$$
$$= 8 \text{ cm}^2$$



$$A = \frac{1}{2} b \cdot h$$
$$= \frac{1}{2} \cdot 4 \cdot 6$$

Give perimeter of triangle  
that has vertices of  
(2,1) (3,4) (5,0)



$$\text{Perimeter} = \sqrt{10} + \sqrt{10} + \sqrt{20} \approx 10.8$$

10-1-13  
6<sup>th</sup> Geo

Converse, Inverse, Contrapositive

① Give converse of  $\sim p \rightarrow q$ .

$$q \rightarrow \sim p$$

② Give inverse of  $p \rightarrow \sim q$

$$\sim p \rightarrow q$$

③ Give contrapositive to

"if you are tall, you  
can dunk a basketball."

If you can't dunk a basketball,  
then you are not tall.

④  $p$ : you aren't nice

$q$ : you are a boy

$$\sim p \rightarrow q$$

If you are nice, then  
you are a boy.

Properties

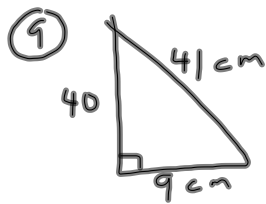
⑤ If  $AB + CD = BX + CD$ , Subtraction  
then  $AB = BX$ .

⑥ If  $\angle A = \angle B$ , then Symmetric  
 $\angle B = \angle A$ .

⑦  $\angle A = \angle A$  Reflexive

⑧ If  $\angle A = \angle B$   
and  $\angle B = 10^\circ$  then Transitive  
 $\angle A = 10^\circ$

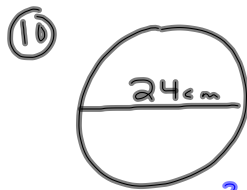
Give area of the following



$$A = \frac{1}{2}bh$$

$$\frac{1}{2} \cdot 9 \cdot 40$$

$$180 \text{ cm}^2$$

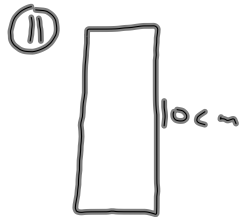


$$A = \pi r^2$$

$$= \pi \cdot 12^2$$

$$= 144\pi$$

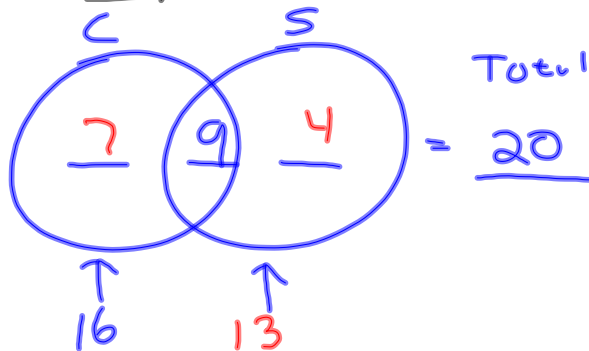
$$\approx 452.4 \text{ cm}^2$$



$$A = l \cdot w$$

$$= 20 \text{ cm}^2$$

⑫ Of the 20 kids all eat cherries or strawberries. If 16 eat cherries and 9 eat both, how many of the 20 eat only strawberries? 4



⑬ 10 kids like me. 8 are in my 1<sup>st</sup> period and 5 are in my 2<sup>nd</sup> period. How many of those that like me are in both of 3 my classes?

