

9. Consider the following statement:

$\forall$  basketball players  $x$ ,  $x$  is tall.

Which of the following are equivalent ways of expressing this statement?

- (a) Every basketball player is tall.
- ~~(b)~~ Among all the basketball players, some are tall.
- ~~(c)~~ Some of all the tall people are basketball players.
- ~~(d)~~ Anyone who is tall is a basketball player.
- (e) All people who are basketball players are tall.
- (f) Anyone who is a basketball player is a tall person.

a, e, f

10. Is the following argument valid?

For all students  $x$ , if  $x$  studies discrete mathematics, then  $x$  is good at logic.

Henry is good at logic.

$\therefore$  Henry studies discrete mathematics.

Not Valid.

It is the converse error

$P \rightarrow Q$   
 $Q$   
 $\therefore P$