21 January	2022	11:05

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Let	<i>p</i> and	q	be	the	pro	positions

- p: I bought a lottery ticket this week.
- q: I won the million dollar jackpot.

Express each of these propositions as an English sen tence.

 $(a) \neg p$

b) $p \lor q$ **c**) $p \to q$

I did not buy a lottery ticket this week.

I bought a lottery ticket this week or Hon the million dollor jackpot.

If I bought a lattery ticket this week then I han the million and dollar jackpot.

3) Let P: We should be honest., Q: We should be dedicated., R: We should be overconfident. Then 'We should be honest or dedicated but not overconfident.' is best represented by?

a) ~P V ~Q V R

PVQNUR

- b) $P \wedge \sim Q \wedge R$
- c) PVQ \wedge R
- e) PVQ \(\times\) ~R

18) If the statement 'None but the brave wins the race is false which of the following statements can be claimed to be true?

Select the correct code:

- All brave persons win the race.
- (X) Some persons who win the race are brave.
- 🖄 No person who wins the race is brave. 🤛

19) p∧q is True when

a) p is true, q is false b) p is false, q is true c) p is true, q is true d) p is false, q is false

prog is true

Truth Table for given Co.

Conford Proposition

3

 $\begin{array}{c|c} (P \vee nq) \rightarrow q \\ \hline P \mid q \mid nq \mid P \vee nq \mid (P \vee nq) \rightarrow q \\ \hline T \mid T \mid F \mid T \mid T \quad T \\ \hline F \mid T \mid F \mid F \mid T \quad T \\ \hline F \mid F \mid T \mid T \mid F \end{array}$

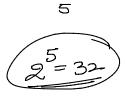
2=4

2=8

$$(p \vee \neg t) \wedge (p \vee \neg s)$$
 $P \mid t \mid s \mid (p \vee \neg t) \mid P \vee \neg s \mid (p \vee \nu \tau) \mid (p \vee \nu \neg s) \mid P \vee \neg s \mid (p \vee \nu \nu \tau) \mid (p \vee \nu \neg s) \mid P \vee \neg s \mid (p \vee \nu \nu \tau) \mid (p \vee \nu \neg s) \mid P \vee \neg s \mid (p \vee \nu \nu \tau) \mid (p \vee \nu \neg s) \mid P \vee \neg s \mid (p \vee \nu \nu \tau) \mid (p \vee \nu \neg s) \mid P \vee \neg s \mid (p \vee \nu \nu \tau) \mid (p \vee \nu \neg s) \mid P \vee \neg s \mid (p \vee \nu \nu \tau) \mid (p \vee \nu \neg s) \mid P \vee \neg s \mid (p \vee \nu \nu \tau) \mid (p \vee \nu \neg s) \mid P \vee \neg s \mid (p \vee \nu \nu \tau) \mid (p \vee \nu \neg s) \mid P \vee \neg s \mid (p \vee \nu \nu \tau) \mid (p \vee \nu \neg s) \mid P \vee \neg s \mid (p \vee \nu \nu \tau) \mid (p \vee \nu \neg s) \mid P \vee \neg s \mid (p \vee \nu \nu \tau) \mid (p \vee \nu \neg s) \mid P \vee \neg s \mid (p \vee \nu \nu \tau) \mid (p \vee \nu) \mid (p \vee \nu \tau) \mid (p \vee \nu) \mid ($

16) Give the number of rows in the truth table for the compound statement. (p \lor q) \land (\sim r \lor s) \lor \sim t

A) 25 B) 10 C) 8 32



23=8