

x = 10

y = 15

z = 20

- a. $!(x > 10)$ - True**, this statement says Not x greater than 10, which is true because x is equal to 10.
- b. $x \leq 5 \parallel y < 15$ - False**, OR means one or the other statement is true, in this equation both statements are false.
- c. $(x \neq 5) \&\& (y \neq z)$ - True**, $\&\&$ both statements must be true, in this equation both statements are true; $x = 10$, and $y \neq z$ ($15 \neq 20$).
- d. $(x \geq z \parallel (x + y \geq z))$ - True**, OR (once again one or the other must be true), $10(x)$ is not greater than or equal to $20(z)$, but $25 \geq 20$ which is true.
- e. $(x \leq y - 2) \&\& (y \geq z) \parallel (z - 2 \neq 20)$ - True**, OR (one must be true and the other false), the $\&\&$ statement is false (y is not greater than or equal to z), but the right statement is true (18 does not equal 20), so the OR statement is executed as true.