A gym coach coach must select 11 seniors to play on football teme .if he can make his selection in 12.376 ways.how many seniors are elibible to play?

Solution:

So we have

$$C_x^{11} = \frac{x!}{11! * (x - 11!)} = 12376$$

$$\frac{x!}{(x - 11!)} = 12376 * 11!$$

$$\frac{x * (x-1) * (x-2) * (x-3) * (x-4) * (x-5) * (x-6) * (x-7) * (x-8) * (x-9) * (x-10) * (x-11)!}{(x - 11!)}$$

$$x * (x-1) * (x-2) * (x-3) * (x-4) * (x-5) * (x-6) * (x-7) * (x-8) * (x-9) * (x-10) = 12376 * 11!$$

$$x = 17$$

Answer:17 seniors.