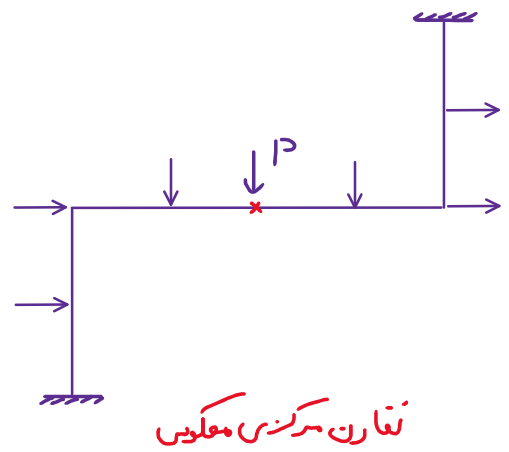
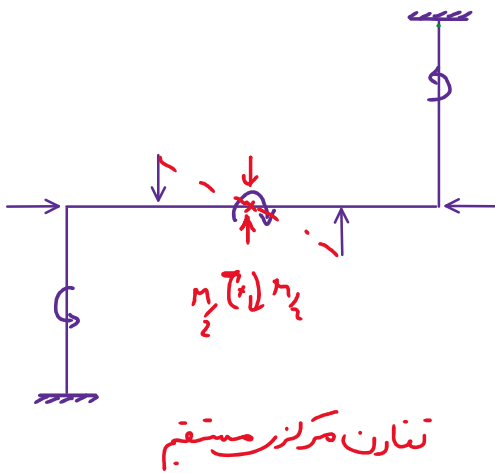
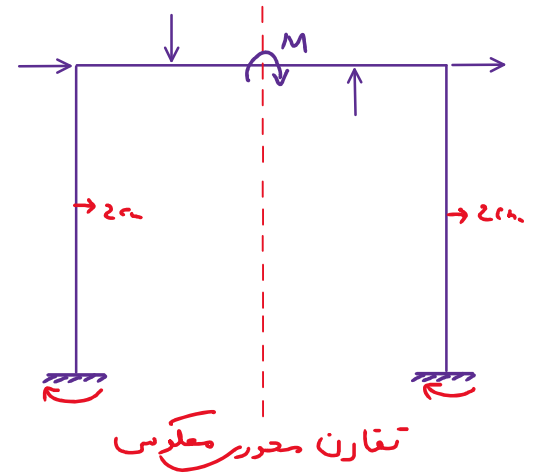
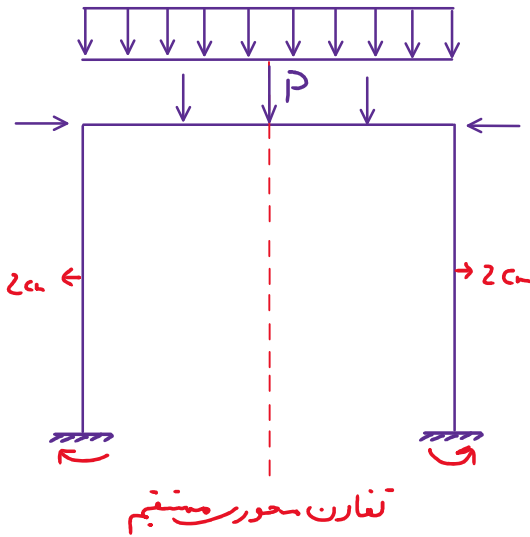
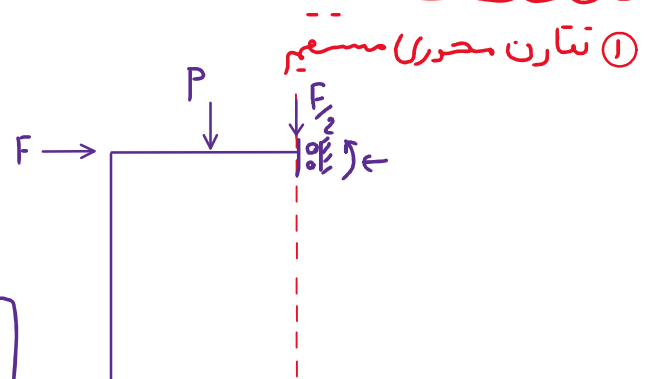
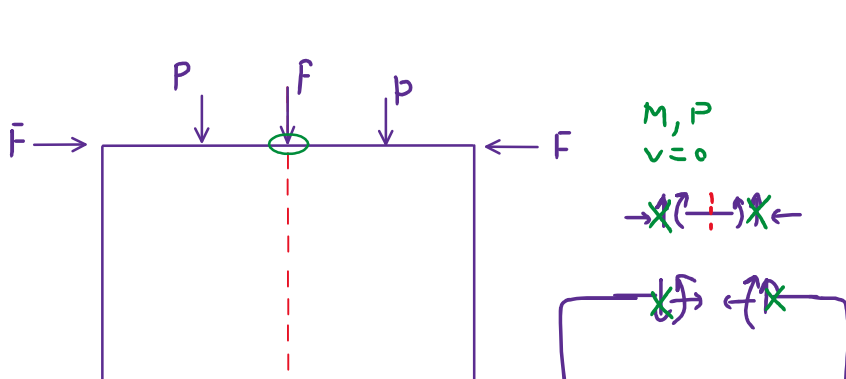


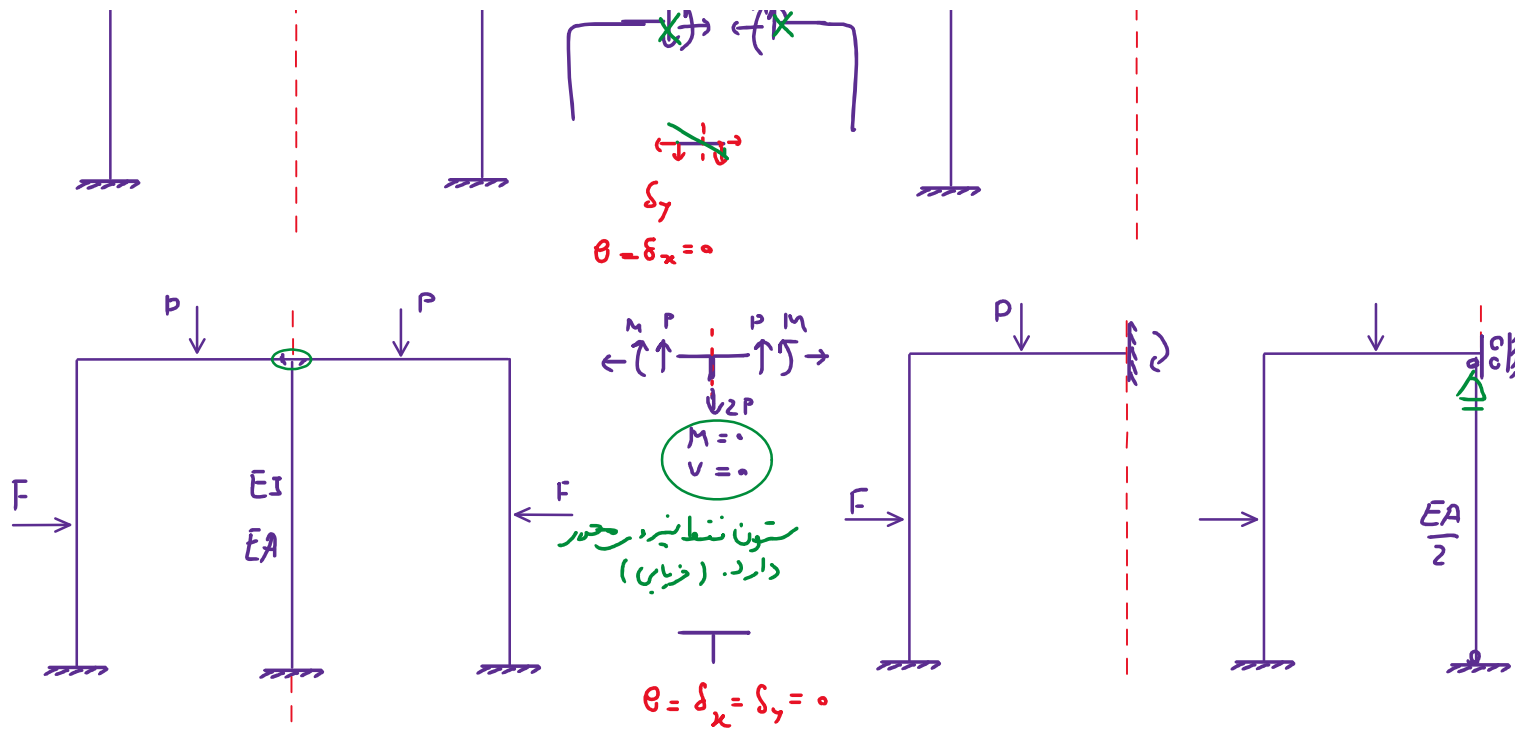
فصل سوم: تحلیل سازه های متقارن

انواع تقارن } محوس { مستقیم  
                  } معکوس { مستقیم  
                  } نقطه ای (مرکز) { معکوس

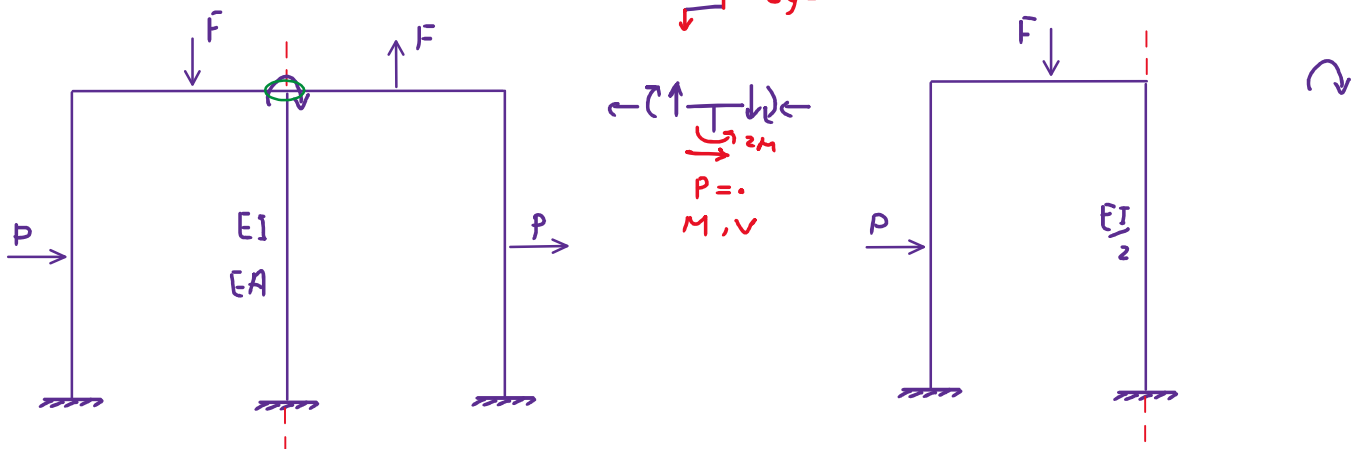
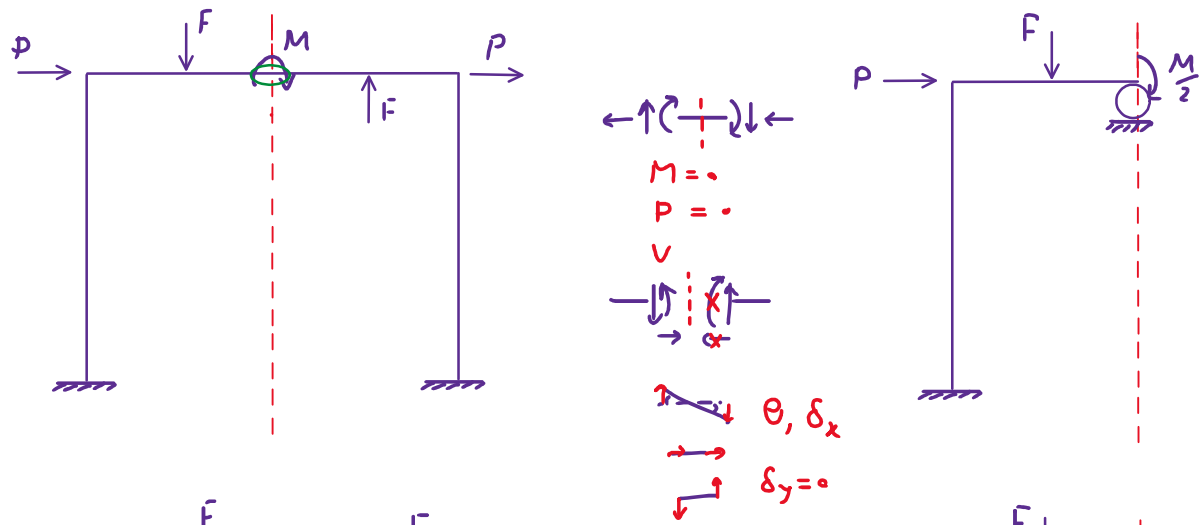


رسم نصف سازه





۷) تبارن محوری معکوس

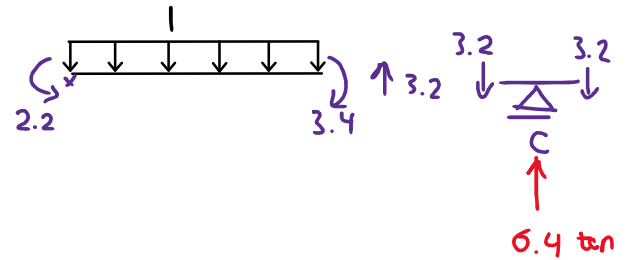
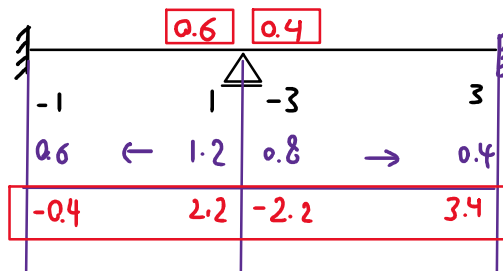
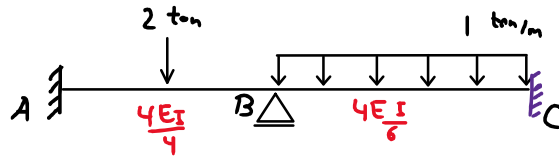
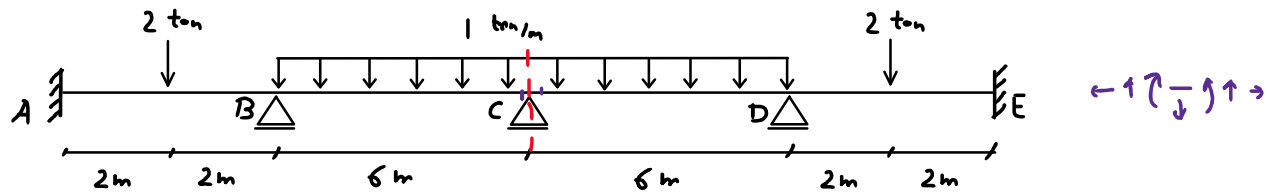


مثال: کترهای انتهای اعضا و عکس العمل ننگه‌گاه C را به دست آورید.

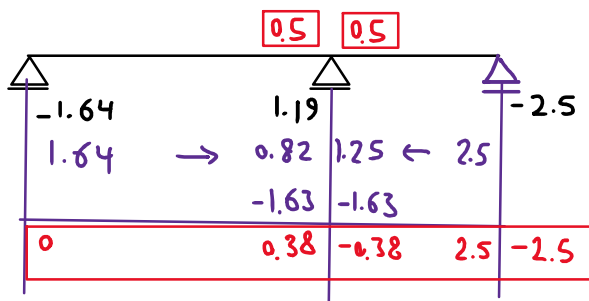
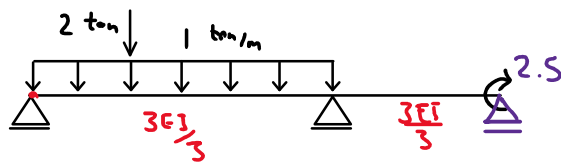
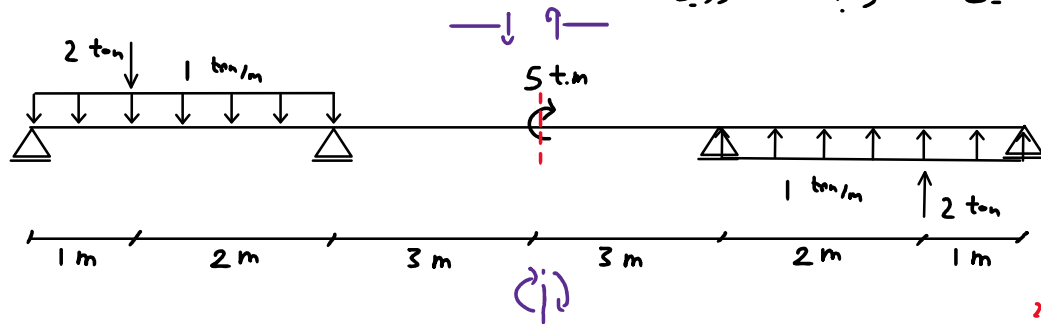
2 ton

1 ton

2 ton



مثال: گنرهای انتقالی اعضا را بدست آورید.



$$-\frac{1 \times 3^2}{12} - \frac{2 \times 1 \times 2^2}{3^2} = -1.64$$

$$\frac{1 \times 3^2}{12} + \frac{2 \times 2 \times 1^2}{3^2} = 1.19$$