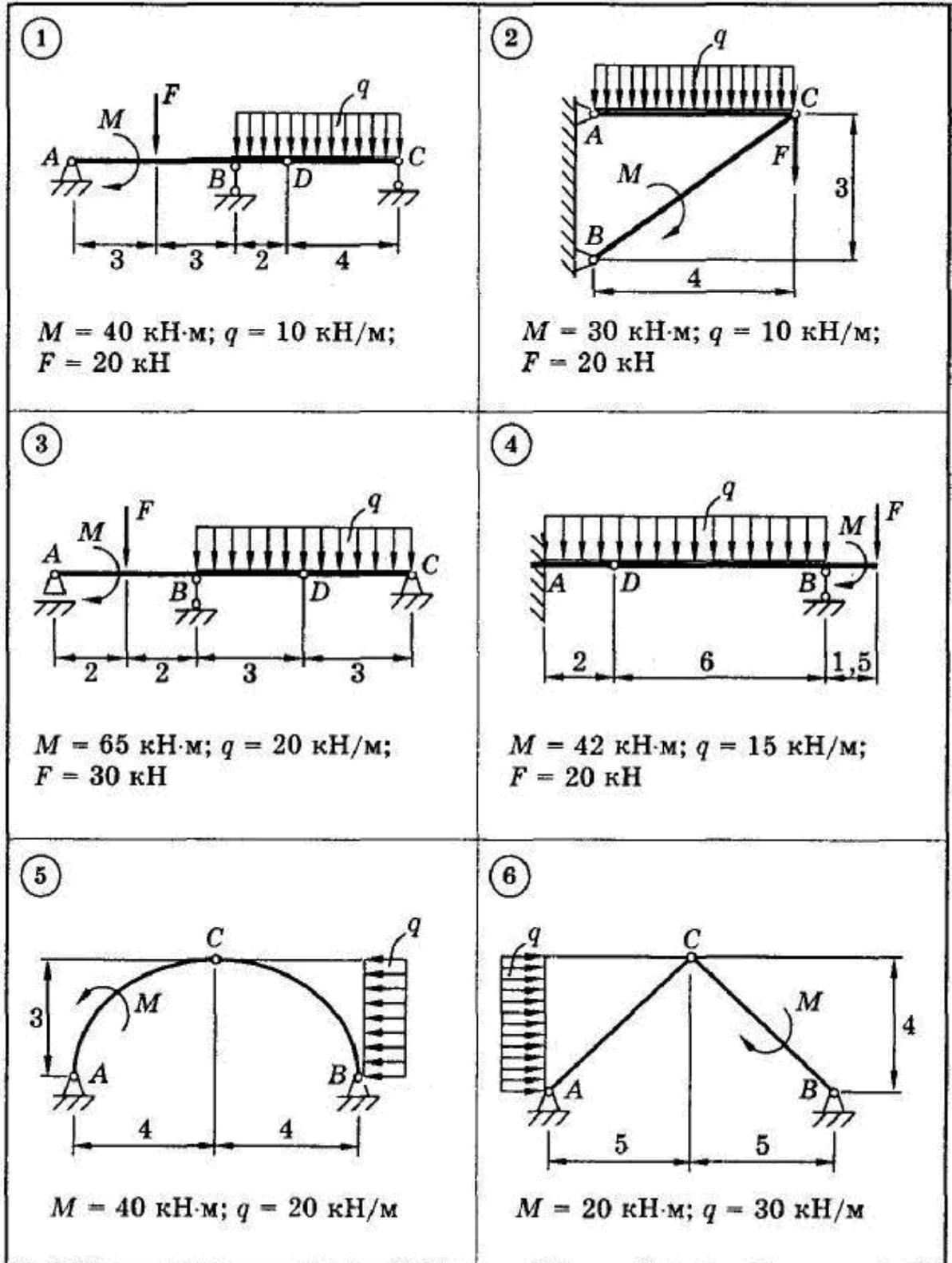
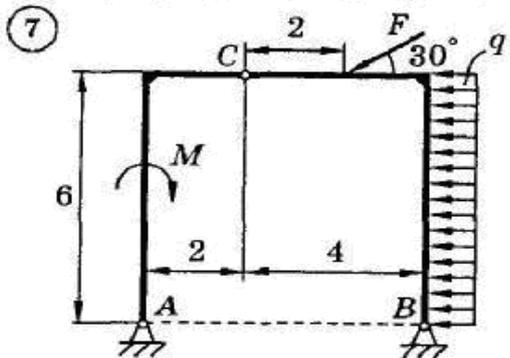


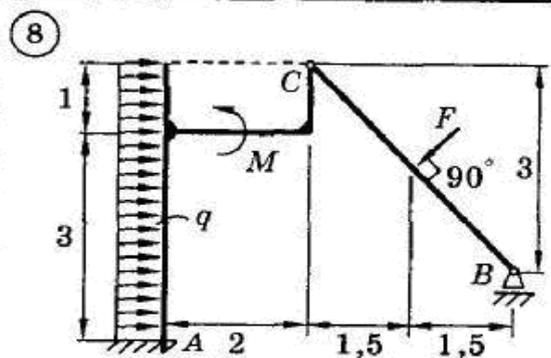
ЗАДАНИЕ С2
РАВНОВЕСИЕ СИСТЕМЫ ТВЕРДЫХ ТЕЛ

Для представленных на схемах 1—30 составных конструкций найти реакции опор. Размеры указаны в метрах. Весом элементов конструкций пренебречь.

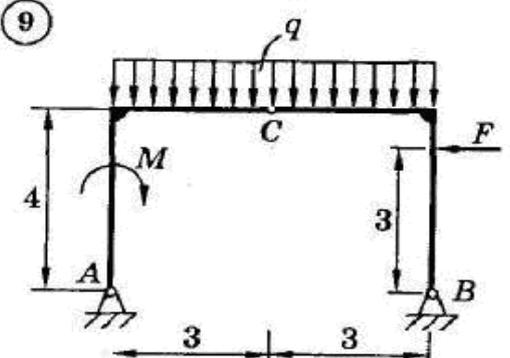




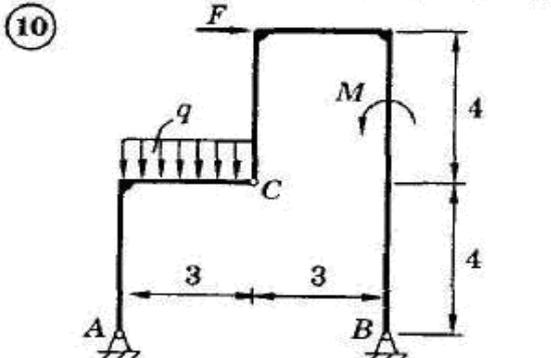
$M = 30 \text{ кН}\cdot\text{м}; q = 10 \text{ кН/м}; F = 15 \text{ кН}$



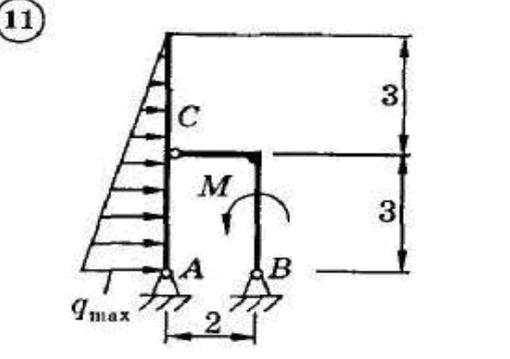
$M = 11 \text{ кН}\cdot\text{м}; q = 4 \text{ кН/м}; F = 13 \text{ кН}$



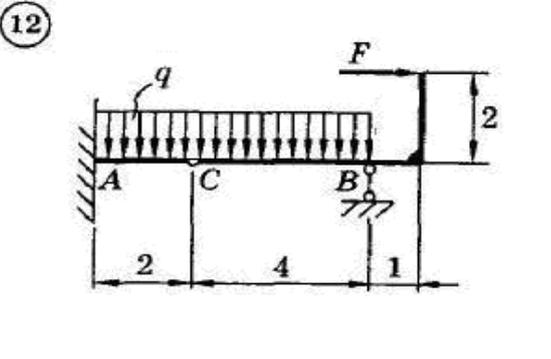
$M = 60 \text{ кН}\cdot\text{м}; q = 20 \text{ кН/м}; F = 30 \text{ кН}$



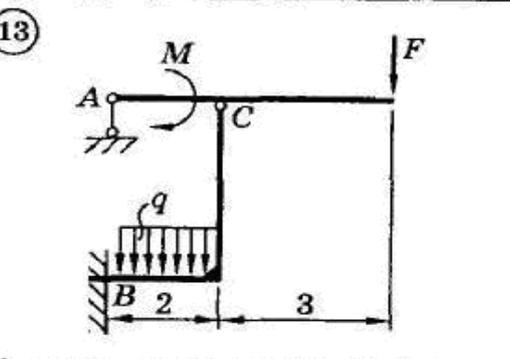
$M = 30 \text{ кН}\cdot\text{м}; q = 10 \text{ кН/м}; F = 20 \text{ кН}$



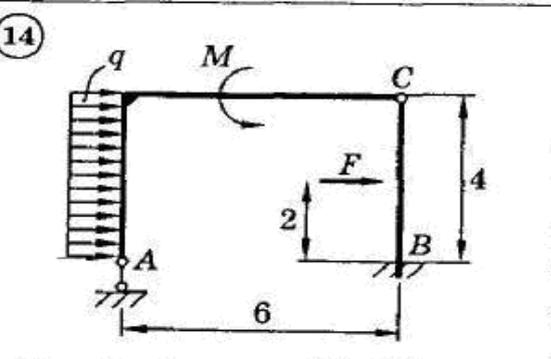
$M = 20 \text{ кН}\cdot\text{м}; q_{\text{max}} = 40 \text{ кН/м}$



$q = 20 \text{ кН/м}; F = 50 \text{ кН}$

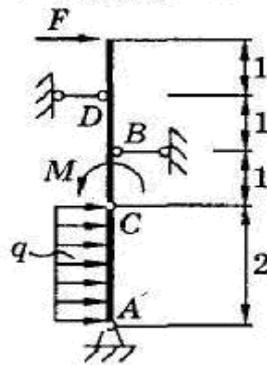


$M = 40 \text{ кН}\cdot\text{м}; q = 20 \text{ кН/м}; F = 20 \text{ кН}$



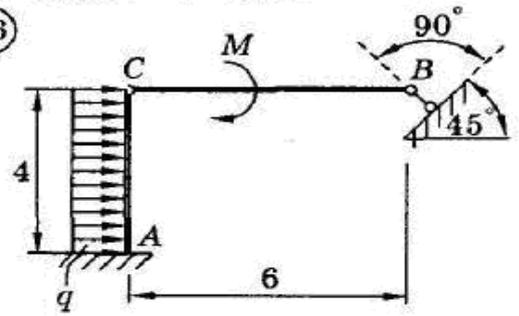
$M = 40 \text{ кН}\cdot\text{м}; q = 10 \text{ кН/м}; F = 30 \text{ кН}$

15



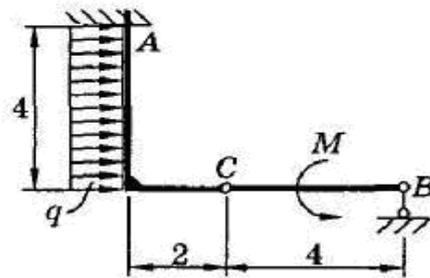
$M = 40 \text{ кН}\cdot\text{м}; q = 30 \text{ кН/м};$
 $F = 20 \text{ кН}$

16



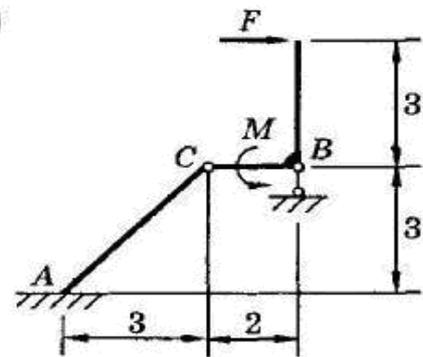
$M = 60 \text{ кН}\cdot\text{м}; q = 25 \text{ кН/м}$

17



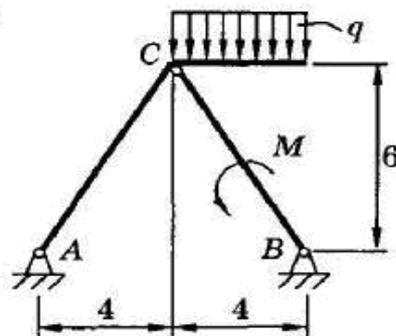
$M = 32 \text{ кН}\cdot\text{м}; q = 15 \text{ кН/м}$

18



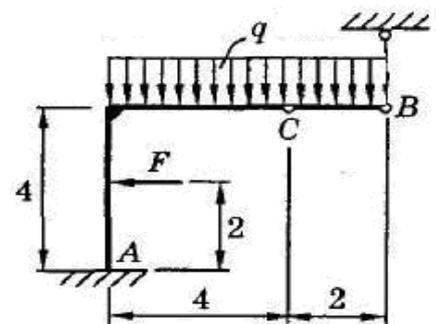
$M = 30 \text{ кН}\cdot\text{м}; F = 50 \text{ кН}$

19



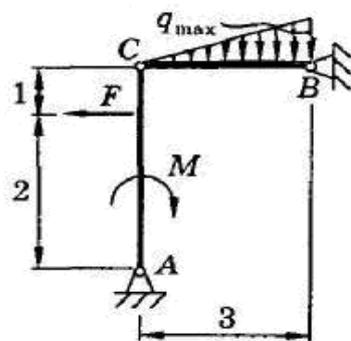
$M = 50 \text{ кН}\cdot\text{м}; q = 40 \text{ кН/м}$

20



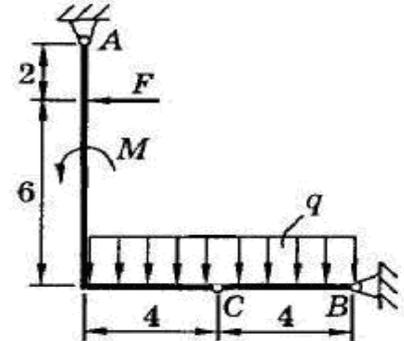
$q = 20 \text{ кН/м}; F = 60 \text{ кН}$

21



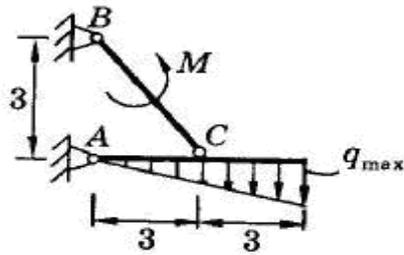
$M = 120 \text{ кН}\cdot\text{м}; q_{\text{max}} = 30 \text{ кН/м};$
 $F = 40 \text{ кН}$

22



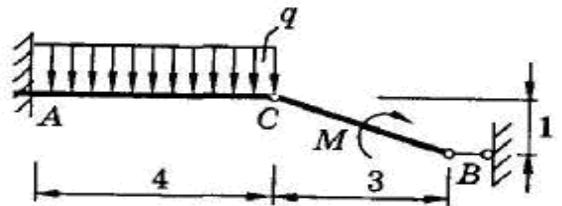
$M = 1600 \text{ кН}\cdot\text{м}; q = 25 \text{ кН/м};$
 $F = 100 \text{ кН}$

23



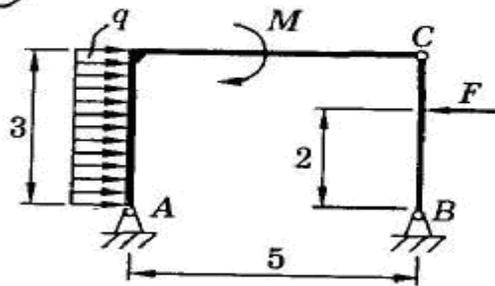
$M = 60 \text{ кН}\cdot\text{м}; q_{\text{max}} = 12 \text{ кН/м}$

24



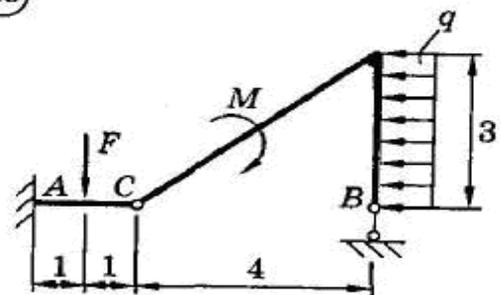
$M = 20 \text{ кН}\cdot\text{м}; q = 40 \text{ кН/м}$

25



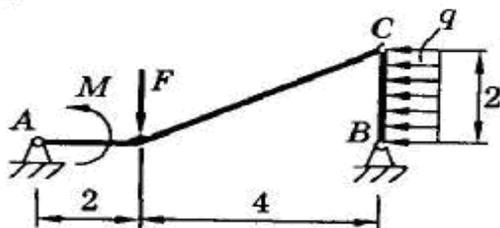
$M = 40 \text{ кН}\cdot\text{м}; q = 20 \text{ кН/м}; F = 60 \text{ кН}$

26



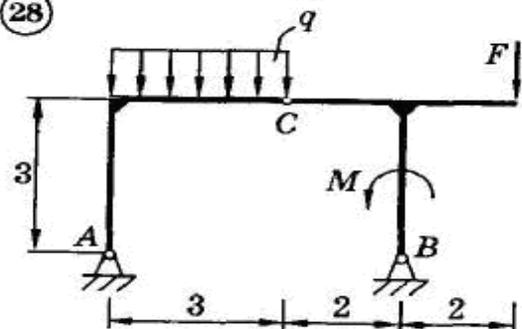
$M = 35 \text{ кН}\cdot\text{м}; q = 30 \text{ кН/м}; F = 50 \text{ кН}$

27



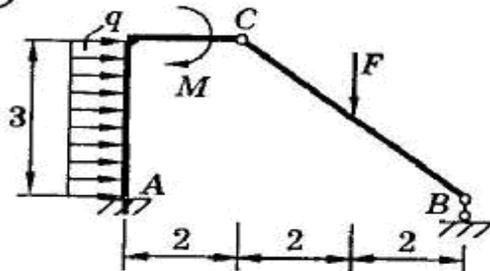
$M = 20 \text{ кН}\cdot\text{м}; q = 25 \text{ кН/м}; F = 40 \text{ кН}$

28



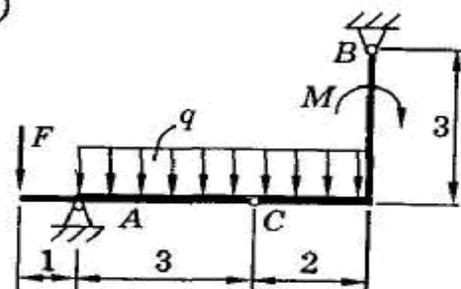
$M = 30 \text{ кН}\cdot\text{м}; q = 10 \text{ кН/м}; F = 50 \text{ кН}$

29



$M = 40 \text{ кН}\cdot\text{м}; q = 10 \text{ кН/м}; F = 30 \text{ кН}$

30



$M = 40 \text{ кН}\cdot\text{м}; q = 20 \text{ кН/м}; F = 100 \text{ кН}$