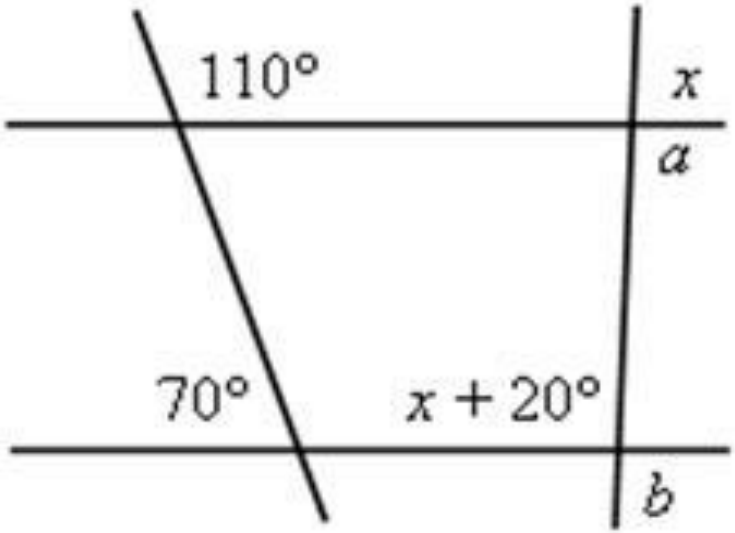
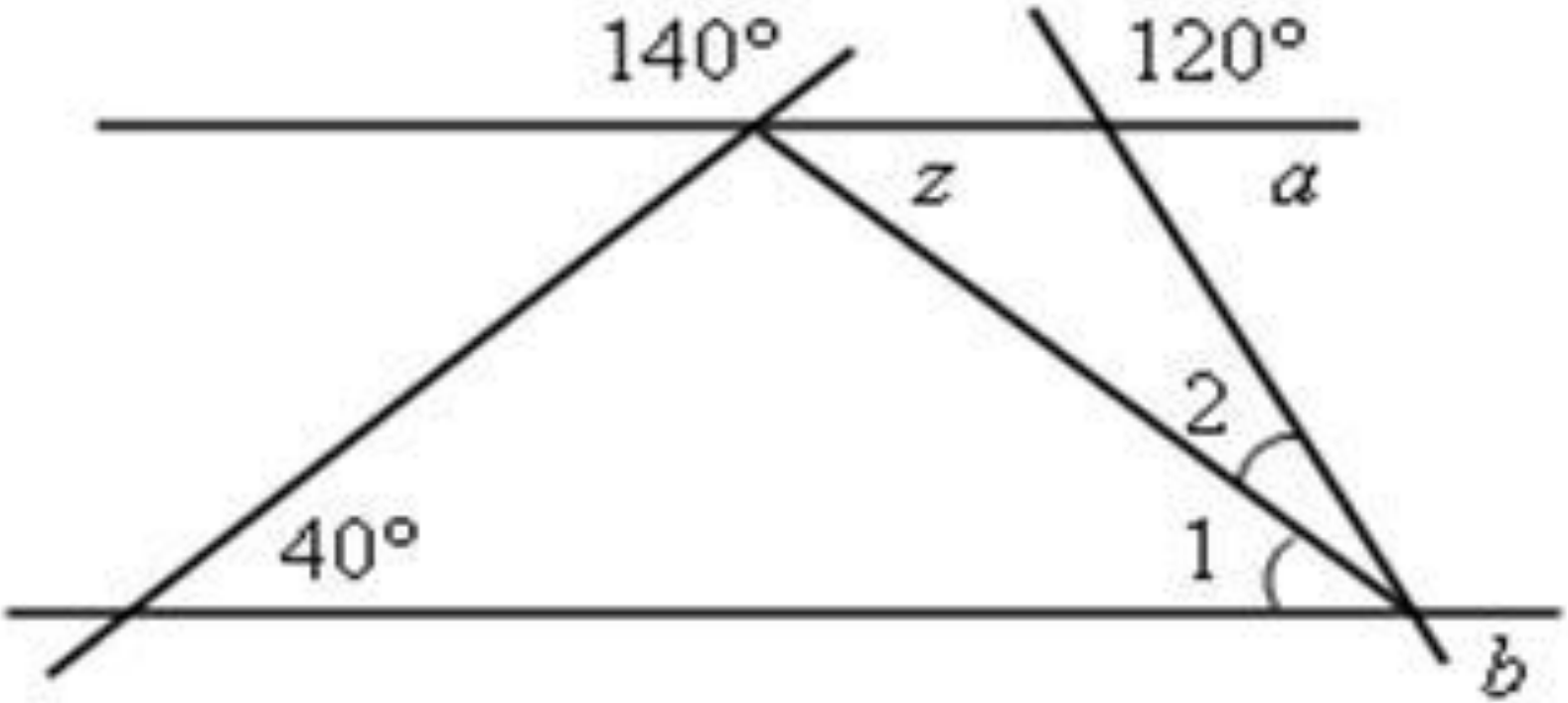
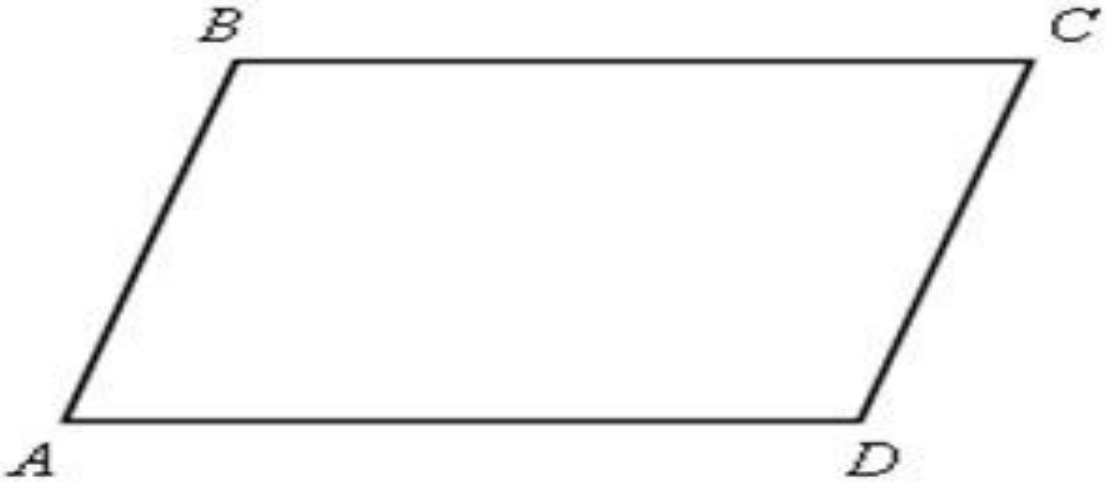
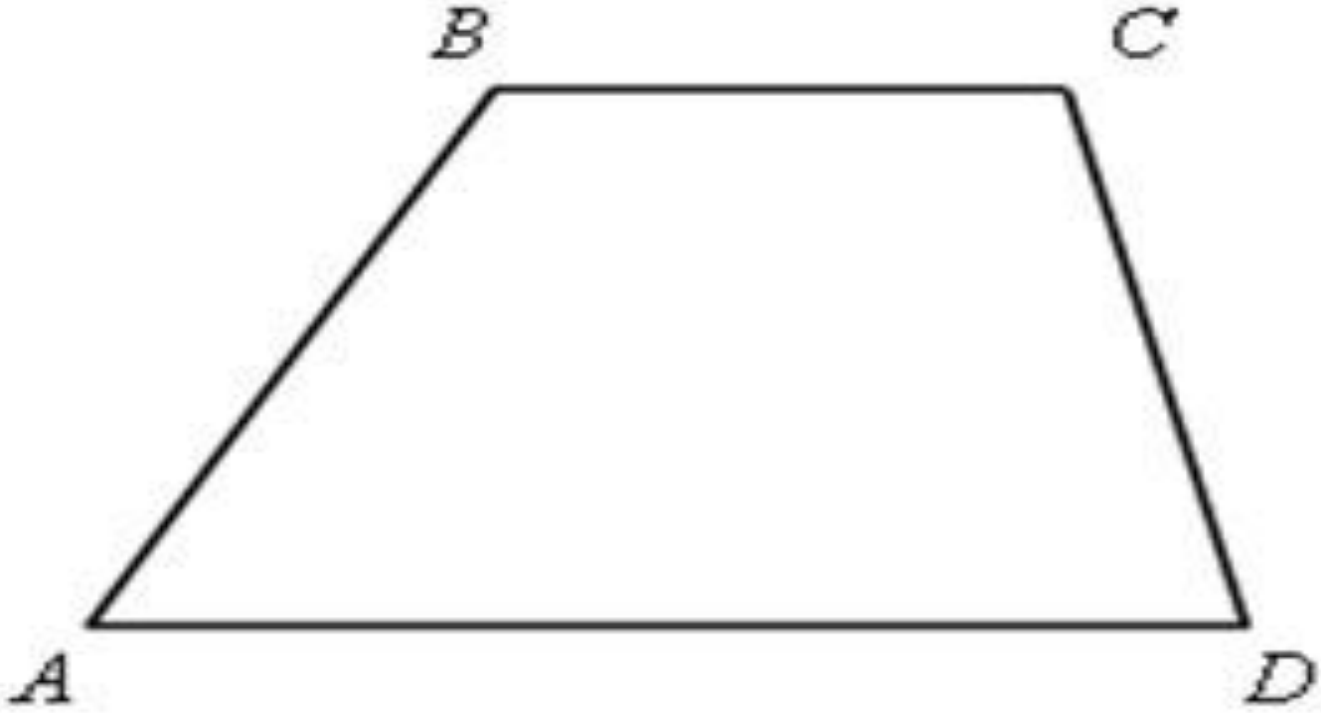
Устно: определите x, y, z.



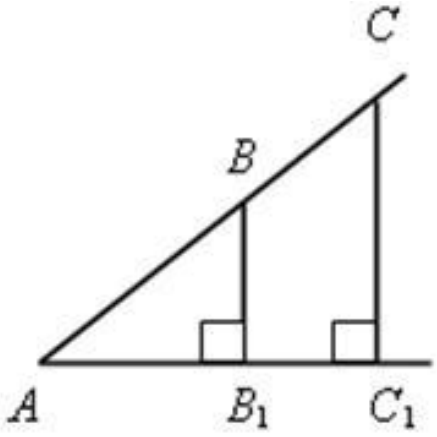

140°
120°
z
a
2
1
40°
b


B
C
A
D

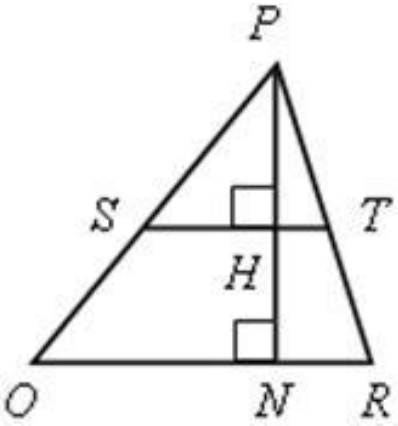

B
C
A
D

Какие четырехугольники на рисунке являются трапециями?

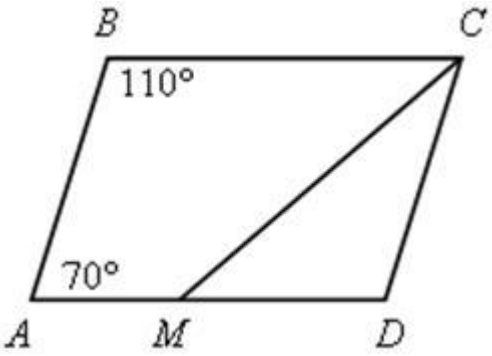
Назовите их основания и боковые стороны.



а)

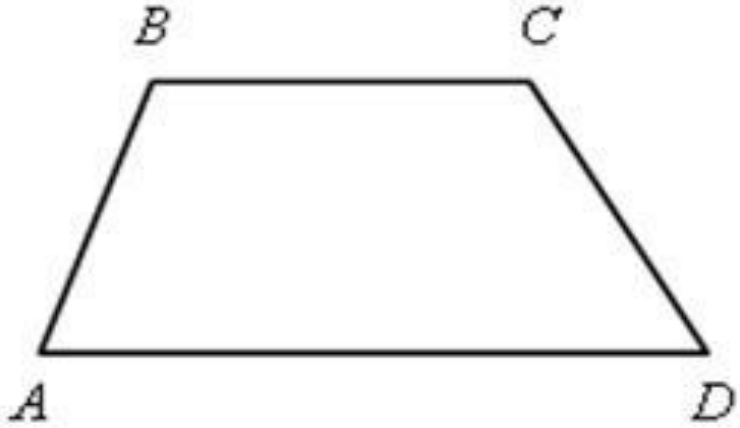


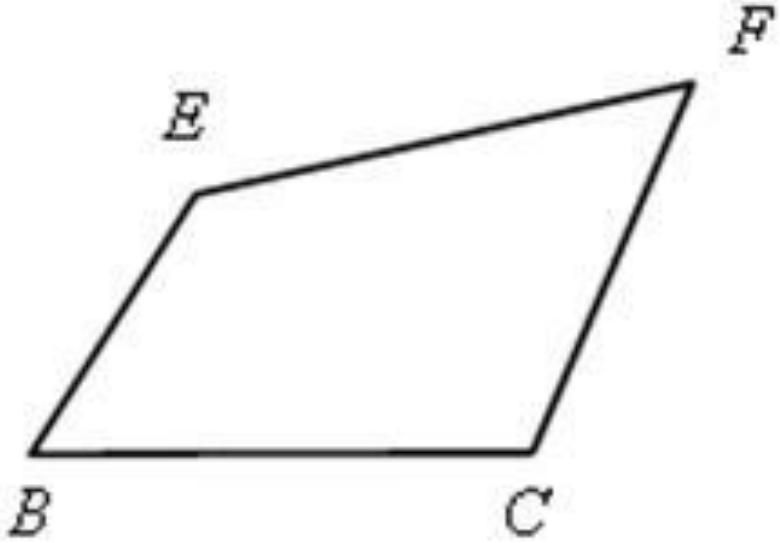
б)



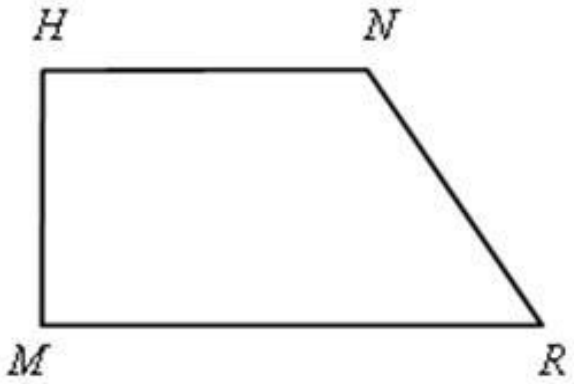
в)

1. ABCD, BEFC – трапеции.

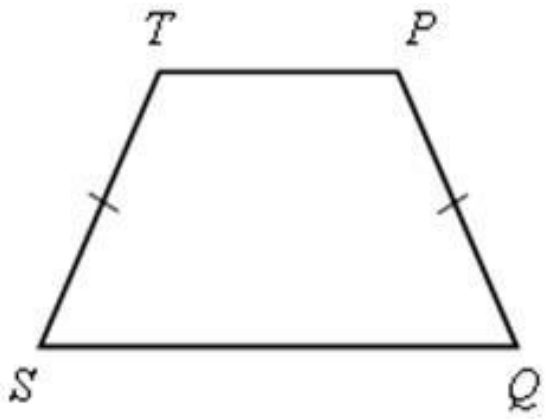




2. Частные виды трапеции:



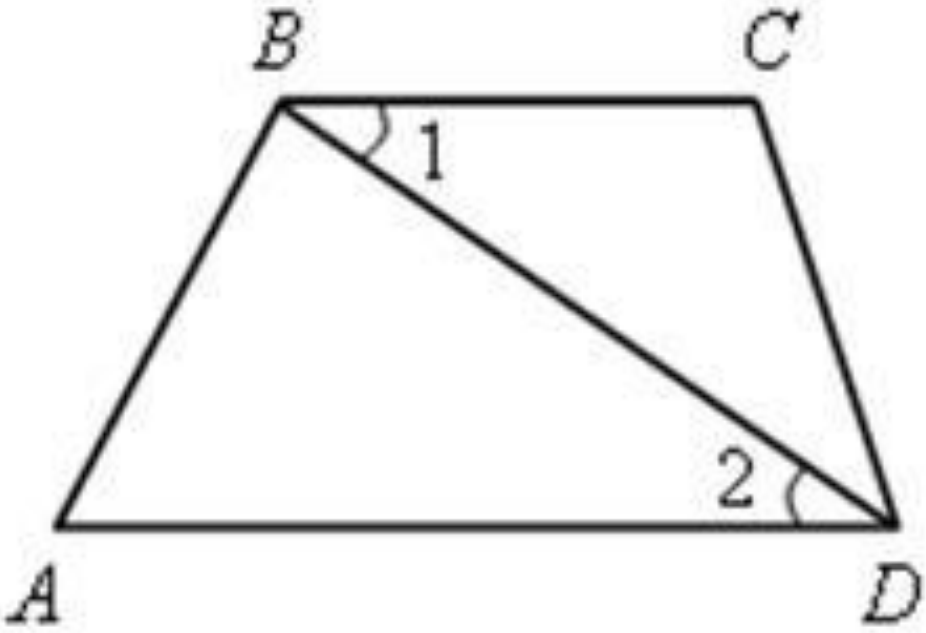
Прямоугольная трапеция



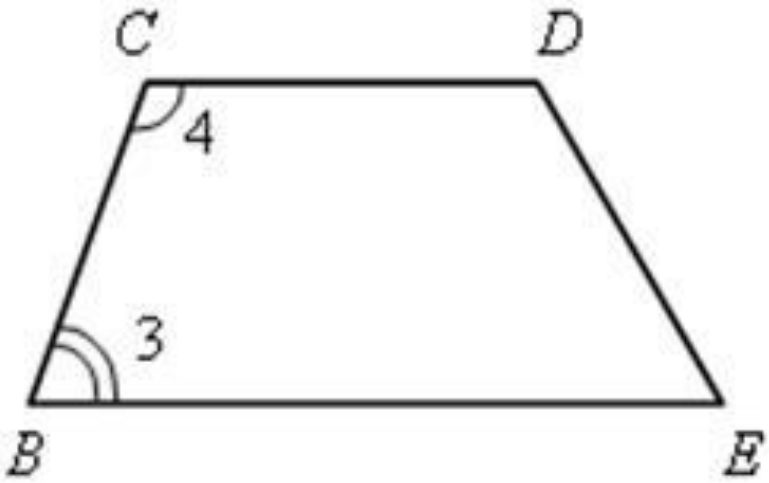
Равнобокая трапеция (равнобедренная)

3. В решении задач на трапецию можно использовать свойства углов
при параллельных прямых и секущей

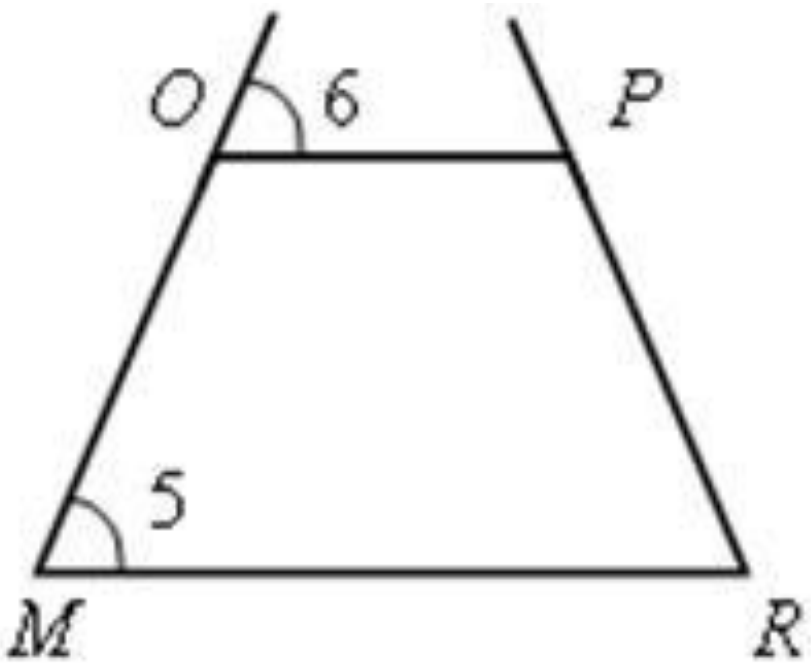
1 = 2 (как внутренние накрест лежащие при BC || AD и секущей BD).



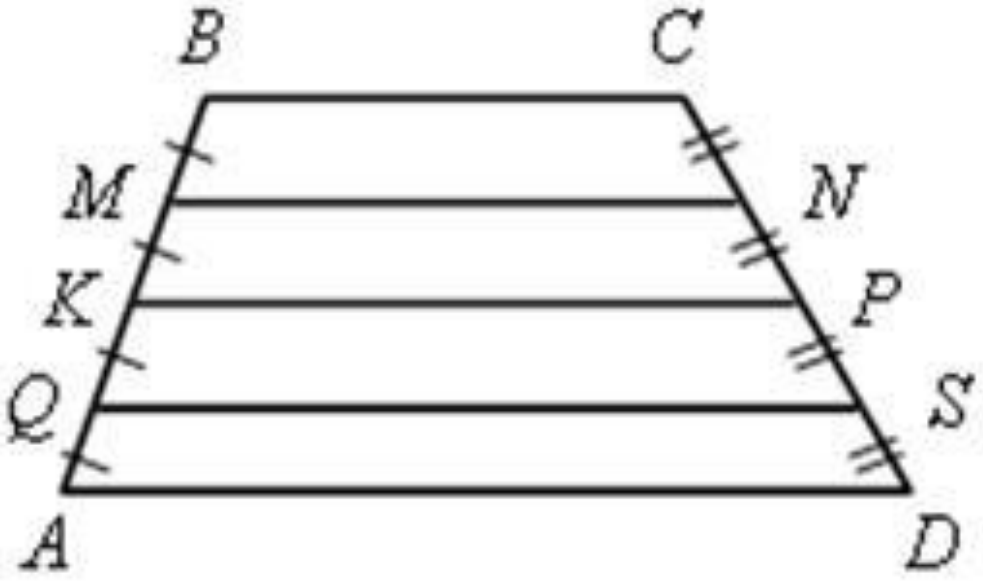
3 + 4 = 180° (как внутренние односторонние при CD || BE и секущей BC).



5 + 6 (как соответственные при OP || MR и секущей OM).



4. Применение теоремы Фалеса в трапеции:

а) BC || MN || KP || QS || AD и MB = MK = KQ = QA, то CN = NP = PS = SD;

б) MB = MK = KQ = QA и CN = NP = PS = SD, то BC || MN || KP || QS || AD.