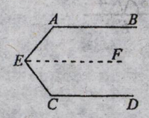
7/3
1×570

182

5.3.1 平行线的性质(2)

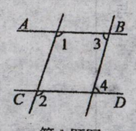
例1 如图所示，已知∠A＝∠AEC＝∠C＝120°，试说明：AB∥CD.



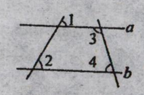
知识要点

出卷人:汪文锋 审卷人:汪文锋

1. 如图所示，请根据图形填空：
∵∠1＝∠2(已知)，∴_____，(同位角相等，两直线平行)
∴∠3＝∠4.(两直线平行，内错角相等)



第1题图



第2题图

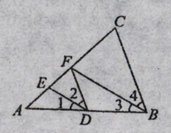
2. 如图，∠1＝∠2，∠3＝110°，则∠4＝_____.

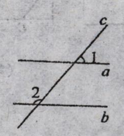
随堂训练 ☞15分钟

1. 如图所示，直线a、b被直线c所截，下列说法正确的是 ( )
A. 当∠1＝∠2时，a∥b　　B. 当a∥b时，∠1＝∠2
C. 当a∥b时，∠1＋∠2＝90°　　D. 当a∥b时，∠1＋∠2＝180°

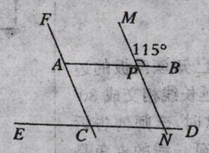
2. (成都市中考)如图，已知AB∥ED，∠ECF＝65°，∠MPB＝115°，则MN与FC的位置关系是 ( )
A. 平行　　B. 相交　　C. 垂直　　D. 不确定

例2 如图，已知点D在AB上，DF∥BC，BF平分∠ABC，DE∥BF. 问∠1＝∠2吗？为什么？

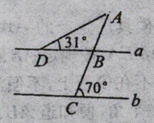




第1题图



第2题图

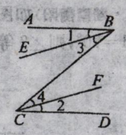


第3题图

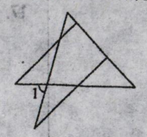
3. 如图，直线a∥b，则∠A的度数为 ( )
A. 28°　　B. 31°　　C. 39°　　D. 42°

4. 如图，已知∠1＝∠2，若要∠3＝∠4，则需知 ( )
A. ∠1＝∠3　　B. ∠2＝∠3　　C. ∠1＝∠4　　D. AB∥CD

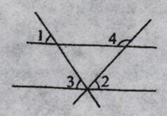
5. (河南省中考)将一副直角三角板如图放置，使含30°角的三角板短直角边和含45°角的三角板的一条直角边重合，∠1的度数为_____.



第4题图



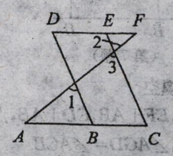
第5题图



第6题图

6. (杭州市中考)如图，已知∠1＝∠2＝∠3＝67°，则∠4＝_____.

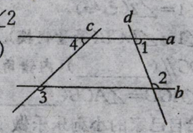
7. 如图所示，已知∠1＝∠2，∠C＝∠D，试说明∠A＝∠F.



第7题图

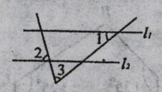
课时作业 ☞40分钟

1. (泸州市中考)如图，∠1与∠2互补，∠3＝135°，∠4＝( )
A. 45°　　B. 55°
C. 65°　　D. 75°

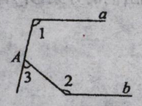


第1题图

2. (德州市中考)如图，直线l_1∥l_2，∠1＝40°，∠2＝75°，则∠3等于 ( )
A. 55°　　B. 60°　　C. 65°　　D. 70°



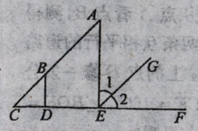
第2题图



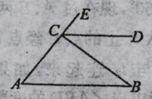
第3题图

3. 如图所示，a∥b，∠1＝105°，∠2＝140°，则∠3的度数是 ( )
A. 75°　　B. 65°　　C. 55°　　D. 50°

4. 如图所示，AE⊥CF，BD⊥CF，∠1＝∠A＝45°，则图中与∠C相等的角有 ( )
A. 4个　　B. 3个　　C. 2个　　D. 1个



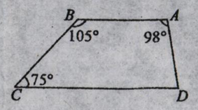
第4题图



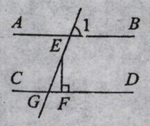
第5题图

5. (宁夏自治区中考)如图，BC⊥AE，垂足为C，过C作CD∥AB，若∠ECD＝48°，则∠B＝_____.

6. 如图：∠A＝98°，∠B＝105°，∠C＝75°，则∠D＝_____.



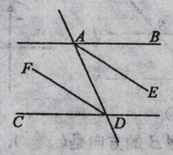
第6题图



第7题图

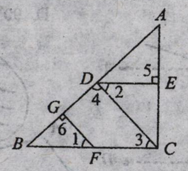
7. 如图，直线AB∥CD，EF⊥CD，F为垂足. 如果∠GEF＝20°，那么∠1的度数是_____.

8. 如图，AB∥CD，AE、DF分别是∠BAD、∠CDA的角平分线，AE与DF平行吗？为什么？



第8题图

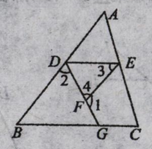
9. 如图，已知DE⊥AC于点E，BC⊥AC于点C，FG⊥AB于点G，∠1＝∠2，求证：CD⊥AB.



第9题图

综合拓展

10. 如图已知∠1＋∠2＝180°. ∠3＝∠B 试判断∠AED与∠C的大小关系，并说明理由.



第10题图