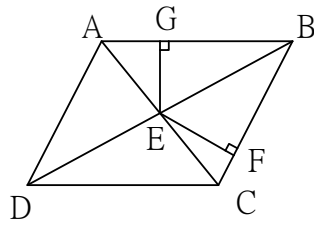
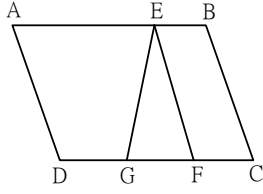


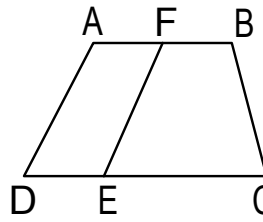
1. 平行四邊形 ABCD 中, 對角線相交於 E 點, $\overline{EG} \perp \overline{AB}$, $\overline{EF} \perp \overline{BC}$, 若 $\overline{EF} = 6$, $\overline{EG} = 5$, 平行四邊形 ABCD 的周長是 44, 則平行四邊形 ABCD 的面積是多少?



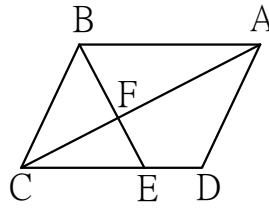
2. 如圖, 四邊形 ABCD 是平行四邊形, $\overline{EF} \parallel \overline{BC}$, 若梯形 AEGD 和 $\triangle EGF$ 和平行四邊形 EBCF 的面積連比是 7:3:4, 則 $\overline{DG} : \overline{GF} : \overline{FC} =$ _____



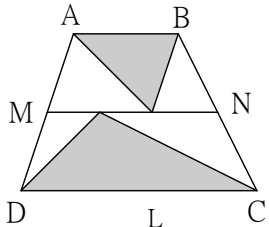
3. 梯形 ABCD, $\overline{AB} \parallel \overline{DC}$, $\overline{AD} \parallel \overline{FE}$, 若四邊形 AFED 和 FBCE 的面積比是 1:2, 且 $\overline{AF} : \overline{FB} = 2:3$, 則 $\overline{DE} : \overline{EC} = ?$ _____



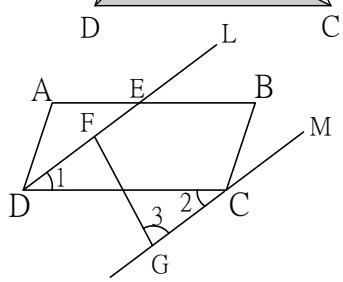
4. \square ABCD 中, \overline{BE} 平分 $\angle ABC$, 若 $\angle ADC = 100^\circ$, $\angle BAC = 30^\circ$, 則 $\angle AFE =$ _____ 度



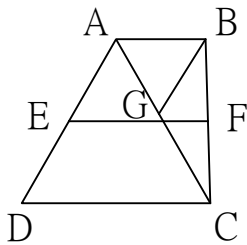
5. 梯形 ABCD 中, 中線 $\overline{MN} = 8$, 高 10, 試求圖中灰色部份的面積? _____



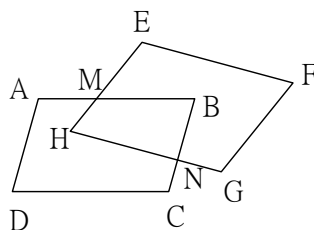
6. 如圖, 四邊形 ABCD 是平行四邊形, $\angle 1 = 40^\circ$, $\angle 2 = 40^\circ$, $\angle 3 = 90^\circ$, 若 $\overline{DE} = 7$, $\overline{FG} = 9$, 則平行四邊形 ABCD 的面積為何? _____



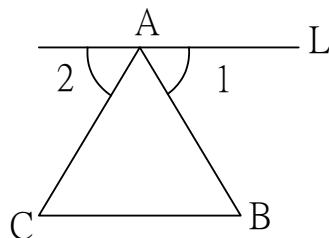
7. 如圖, 正 $\triangle ADC$, 正 $\triangle ABG$, $\overline{AD} = 6$, $\overline{BG} = 2$, 若 E、F 分別是 \overline{AD} 和 \overline{BC} 的中點, 則 $\overline{EF} = ?$ _____



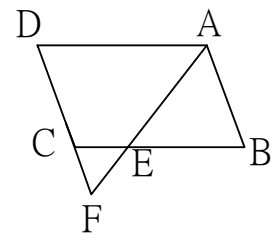
8. 如圖, ABCD 和 EFGH 都是平行四邊形, 若 $\angle D = 84^\circ$, $\angle E = 107^\circ$, $\angle BME = 62^\circ$, 則 $\angle BNH =$ _____ 度



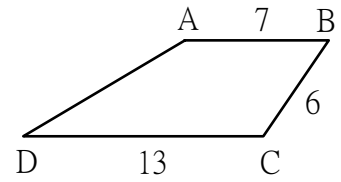
9. 如圖, 直線 L 過 $\triangle ABC$ 的頂點 A, 若 $\angle 1 = 62^\circ$, $\angle 2 = 64^\circ$, 試比較 $\triangle ABC$ 的三邊大小? _____



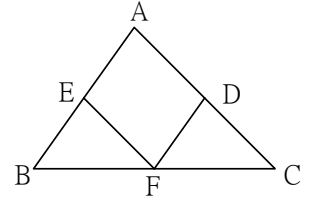
10. 如圖, \square ABCD 中, \overline{AF} 平分 $\angle BAD$, $\overline{AB} = 5$, $\overline{CF} = 3$, 則 \square ABCD 的周長是多少? _____



11. 如圖, 梯形 ABCD, $\overline{AB} \parallel \overline{DC}$, $\angle D = 30^\circ$, 試依圖中所給數據, 求
(1) $\overline{AD} = ?$ _____
(2) 梯形 ABCD 的面積? _____

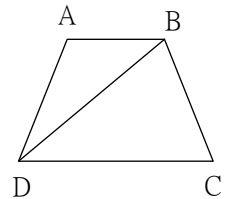


12. 如圖, $\triangle ABC$ 中, $\angle A = 86^\circ$, $\angle BEF = 86^\circ$, $\angle ADF = 94^\circ$, $\overline{BC} = 20$, $\triangle BEF$ 周長是 19, $\triangle FDC$ 周長是 17, 則 $\triangle ABC$ 的周長是多少? _____



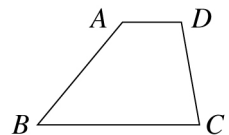
13. 等腰梯形的兩底長分別是 3 和 7, 高是 4, 則對角線長是多少? _____

14. 如圖, 等腰梯形 ABCD, $\overline{AB} \parallel \overline{DC}$, $\angle C = 60^\circ$, $\overline{BC} = 7$, 則等腰梯形 ABCD 的面積是多少? _____

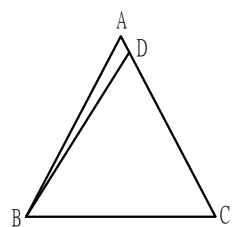


15. 等腰 \triangle 的底角大於頂角, 試求底角度數的範圍? _____

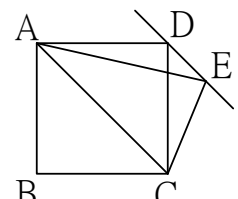
16. 如圖, 梯形 ABCD 中, $\overline{AD} \parallel \overline{BC}$, $\angle D = 2\angle B$, $\overline{AD} = 5$, $\overline{CD} = 9$, 則此梯形的中線長為多少? _____



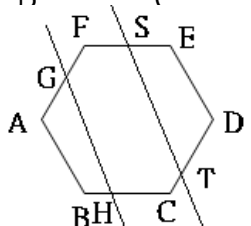
17. 如圖, 等腰 $\triangle ABC$, $\overline{AB} = \overline{AC}$, 若 $\overline{AB} + \overline{AD} = \overline{BC}$, 則 \overline{BD} 、 \overline{BC} 、 \overline{CD} 的大小關係為何? _____



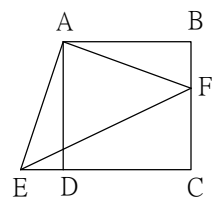
18. 如圖, 正方形 ABCD, $\overline{AC} = 8$, 若 $\overline{AC} \parallel \overline{DE}$, 則 $\triangle AEC$ 的面積是多少? _____



19. 如圖, 正六邊形 ABCDEF, $\overline{GH} \parallel \overline{ST}$, 若 $\angle STD = 80^\circ$, 則 $\angle FGH =$ _____ 度



20. 如圖, 正方形 ABCD, $\angle BAE = 90^\circ$, 若 $\overline{AB} = 7$, $\overline{BF} = 2$, 則 $\overline{EF} = ?$ _____



參考答案

1. 120
2. $2:3:2$
3. $2:5$
4. 70
5. 40
6. 63
7. 4
8. 85
9. $AC > AB > BC$
10. 26
11. (1) $6\sqrt{3}$ (2) $30\sqrt{3}$
12. 36
13. $\sqrt{41}$
14. $\frac{147\sqrt{3}}{4}$
15. $90 > \text{底角} > 60$
16. $\frac{19}{2}$
17. $BC > BD > CD$
18. 16
19. 125
20. $\sqrt{106}$