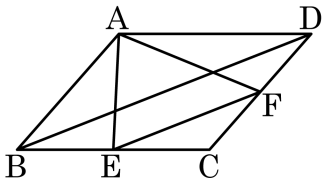


1. 평행사변형 ABCD에서 $\overline{EF} \parallel \overline{BD}$ 이다. $\triangle ABE = 20 \text{ cm}^2$ 일 때, $\triangle AFD$ 의 넓이를 구하여라.



① 16 cm^2

② 18 cm^2

③ 20 cm^2

④ 22 cm^2

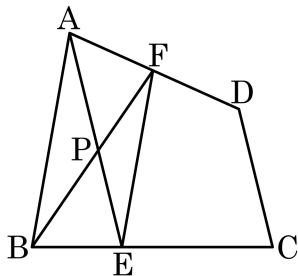
⑤ 24 cm^2

해설

$\overline{DE}$ 와 $\overline{BF}$ 를 그으면

$$\triangle ABE = \triangle DBE = \triangle DBF = \triangle DAF$$

2. 다음 그림과 같은 사각형 ABCD에서 $\overline{AB} \parallel \overline{FE}$ 일 때, 넓이가 같은 삼각형은 모두 몇 쌍 있는가?



① 1쌍

② 2쌍

③ 3쌍

④ 4쌍

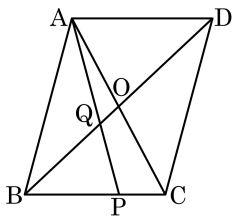
⑤ 5쌍

해설

$$\triangle ABE = \triangle ABF, \triangle AEF = \triangle BEF$$

$$\triangle APF = \triangle PBE$$

3. 다음 평행사변형 ABCD 의 넓이는 160 cm^2 이고 $\overline{BC}$ 의 중점을 P, $\overline{AQ} : \overline{QP} = 3 : 2$ 일 때, $\square QPCO$ 의 넓이는?



- ① 22 cm^2 ② 24 cm^2 ③ 26 cm^2
 ④ 28 cm^2 ⑤ 30 cm^2

해설

$$\begin{aligned}\triangle APC &= \frac{1}{2}\triangle ABC \\ &= \frac{1}{2} \times \frac{1}{2} \times \square ABCD \\ &= \frac{1}{2} \times \frac{1}{2} \times 160 \\ &= 40(\text{ cm}^2)\end{aligned}$$

$$\begin{aligned}\triangle PCO &= \triangle APO = \frac{1}{2}\triangle APC \\ &= \frac{1}{2} \times 40 = 20(\text{ cm}^2)\end{aligned}$$

$$\overline{AQ} : \overline{QP} = 3 : 2 \text{ 이므로}$$

$$\triangle QPO = \frac{2}{5}\triangle APO = \frac{2}{5} \times 20 = 8(\text{ cm}^2)$$

$$\begin{aligned}\therefore \square QPCO &= \triangle PCO + \triangle QPO \\ &= 20 + 8 = 28(\text{ cm}^2)\end{aligned}$$