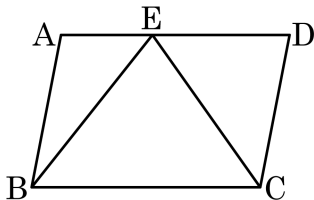


1. 다음 그림과 같은 평행사변형 ABCD 에서 $\overline{AE} : \overline{DE} = 2 : 3$ 이고 $\triangle ABE = 10\text{cm}^2$ 일 때, $\triangle EBC$ 의 넓이는?



① 10cm^2

② 12cm^2

③ 15cm^2

④ 20cm^2

⑤ 25cm^2

해설

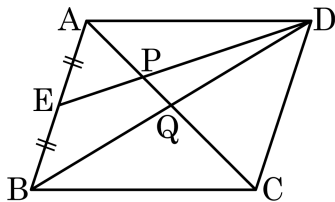
$$\triangle ABE + \triangle DCE = \frac{1}{2} \square ABCD$$

$$\triangle ABE : \triangle DCE = 2 : 3$$

$$\triangle DCE = 15(\text{cm}^2)$$

$$\therefore \triangle EBC = \frac{1}{2} \square ABCD = 25(\text{cm}^2)$$

2. 다음 그림의 평행사변형 ABCD에서 점 E는 변 AB의 중점이고, $\overline{DP} : \overline{PE} = 2 : 1$ 이다. 평행사변형의 넓이는 48cm^2 일 때, $\triangle DPQ$ 의 넓이는?



① 4cm^2

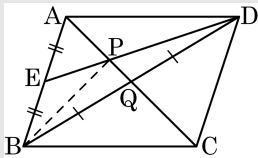
② $\frac{9}{2}\text{cm}^2$

③ 5cm^2

④ $\frac{11}{2}\text{cm}^2$

⑤ 6cm^2

해설



$$\triangle BDE = \frac{1}{2}\triangle ABD = \frac{1}{2} \times \frac{1}{2}\square ABCD = 12(\text{cm}^2)$$

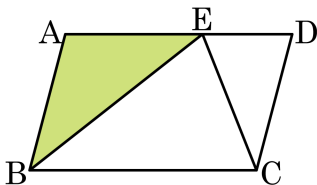
$$\triangle DBP : \triangle EBP = 2 : 1 \text{ 이므로}$$

$$\triangle DBP = \frac{2}{3}\triangle BDE = \frac{2}{3} \times 12 = 8(\text{cm}^2)$$

$$\triangle BPQ : \triangle DPQ = 1 : 1$$

$$\triangle DPQ = \frac{1}{2}\triangle DBP = \frac{1}{2} \times 8 = 4(\text{cm}^2)$$

3. 다음 그림과 같은 평행사변형 ABCD에서 $\overline{AE} : \overline{ED} = 3 : 2$ 이고 $\square ABCD = 60\text{cm}^2$ 일 때, $\triangle ABE$ 의 넓이는?



① 18cm^2

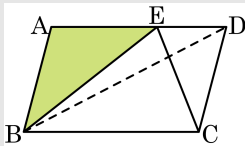
② 22cm^2

③ 26cm^2

④ 30cm^2

⑤ 34cm^2

해설



$$\triangle BEC = \triangle BDC = \frac{1}{2} \square ABCD = 30(\text{cm}^2)$$

$$\triangle ABE + \triangle CED = \square ABCD - \triangle BEC = 60 - 30 = 30(\text{cm}^2)$$

또, $\triangle ABE : \triangle DCE = 3 : 2$ 이므로

$$\triangle ABE = \frac{3}{5} \times 30 = 18(\text{cm}^2)$$