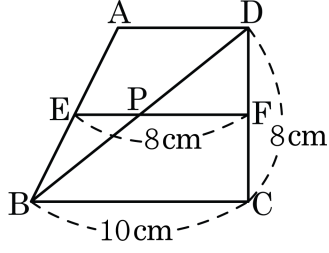


1. 다음 그림과 같은 사다리꼴 ABCD 에서 $\overline{AD} // \overline{EF} // \overline{BC}$ 이고 점 F 는 $\overline{CD}$ 의 중점이다. $\overline{BC} = 10\text{cm}$, $\overline{CD} = 8\text{cm}$, $\overline{EF} = 8\text{cm}$ 일 때, $\triangle BPE$ 의 넓이는?

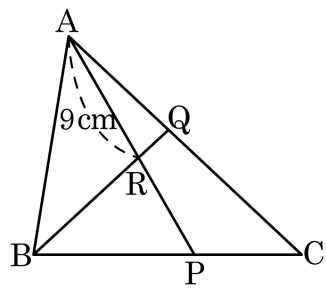


- ① 4cm^2 ② 5cm^2 ③ 6cm^2
 ④ 10cm^2 ⑤ 12cm^2

해설

$\overline{PF} : \overline{BC} = 1 : 2$ ∴ $\overline{PF} = 5\text{cm}$,
 따라서 $\overline{EP} = 3\text{cm}$, $\overline{FC} = 4\text{cm}$,
 $\therefore \triangle BPE = 3 \times 4 \times \frac{1}{2} = 6(\text{cm}^2)$

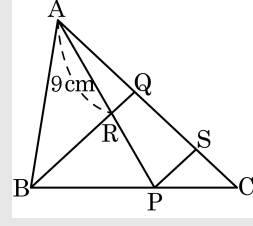
2. 다음 그림에서 $\overline{BP} : \overline{PC} = 3 : 2$, $\overline{AQ} : \overline{QC} = 3 : 4$ 이다. $\overline{AR} = 9\text{cm}$ 일 때, $\overline{RP}$ 의 길이는?



- ① 6.2cm ② 7.2cm ③ 8cm
 ④ 9cm ⑤ 9.2cm

해설

$\overline{BQ} \parallel \overline{PS}$ 인 선분 PS 를 그으면



$$\overline{PC} : \overline{BC} = \overline{SC} : \overline{QC}$$

$$2 : 5 = \overline{SC} : \frac{4}{7}\overline{AC}$$

$$5\overline{SC} = \frac{8}{7}\overline{AC}$$

$$\overline{SC} = \frac{8}{35}\overline{AC}$$

$$\overline{QS} = \overline{QC} - \overline{SC} = \frac{12}{35}\overline{AC}$$

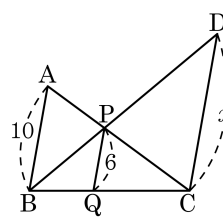
$$9 : \overline{RP} = \frac{3}{7}\overline{AC} : \frac{12}{35}\overline{AC}$$

$$9 : \overline{RP} = 5 : 4$$

$$\therefore \overline{RP} = \frac{36}{5} = 7.2(\text{cm})$$

3. 다음 그림에서 $\overline{AB} \parallel \overline{PQ} \parallel \overline{DC}$, $\overline{AB} = 10$, $\overline{PQ} = 6$ 일 때, x 의 값은?

- ① 12 ② 13 ③ 14
 ④ 15 ⑤ 16



해설

$$\overline{BC} : \overline{QC} = \overline{AB} : \overline{PQ} \text{ 이므로}$$

$$\overline{PQ} : \overline{CD} = \overline{BQ} : \overline{BC}$$

$$6 : x = 2 : 5$$

$$x = 15$$