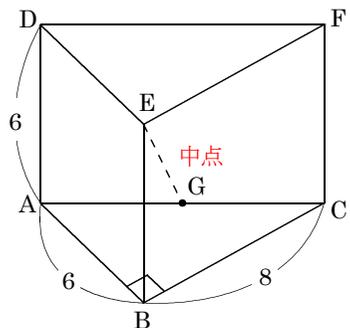


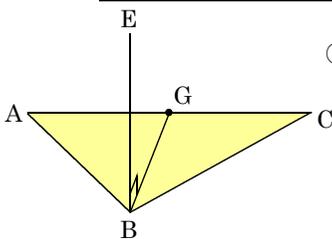
6



(ア) この三角柱において、2点E、G間の距離を求めよ。

① 直線EBと面ABCは 90° だから

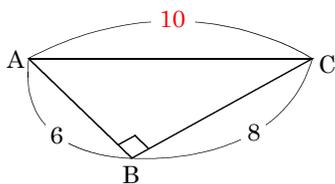
$EB \perp BG$



② ACを求める

③ GHを求める

中点連結定理

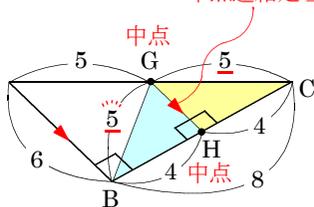


$$AC = \sqrt{6^2 + 8^2}$$

$$AC = \sqrt{36 + 64}$$

$$AC = \sqrt{100}$$

$$AC = 10$$



$\triangle BGH \cong \triangle GCH$

$\angle GHB = \angle GHC = 90^\circ$

$BH = CH$

$GH = GH$ (共通)

2組の辺とその間の角がそれぞれ等しい

$BG = CG = 5$

$\triangle BGH \cong \triangle GCH$

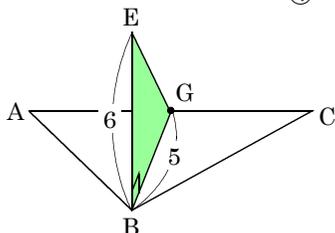
合同な三角形

④ EGを求める

$$EG = \sqrt{6^2 + 5^2}$$

$$EG = \sqrt{36 + 25}$$

$$EG = \sqrt{61}$$



答 $\sqrt{61}$ cm