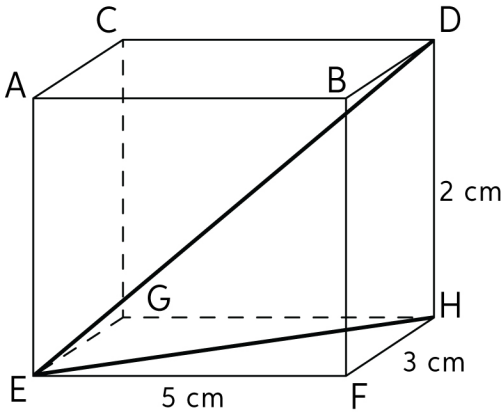


Pythagoras' Theorem in 3D

Apply Pythagoras' theorem to calculate the unknown lengths marked in solid line. One is solved for you.



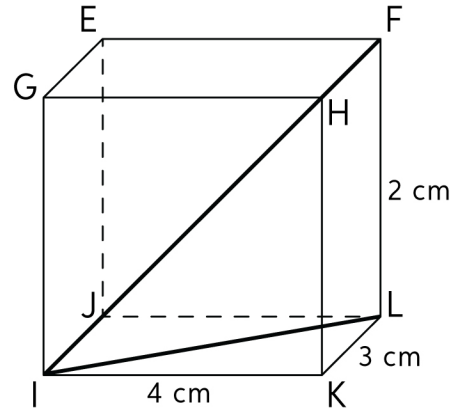
$$EH = \sqrt{(5)^2 + (3)^2}$$

$$= \underline{5.83 \text{ cm}}$$

$$ED = \sqrt{(\sqrt{34})^2 + (2)^2}$$

$$= \underline{6.16 \text{ cm}}$$

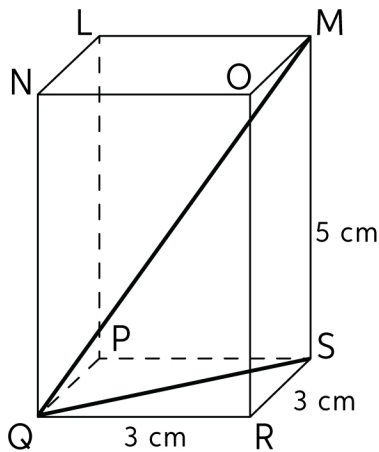
①



$$IL = \underline{\hspace{2cm}}$$

$$IF = \underline{\hspace{2cm}}$$

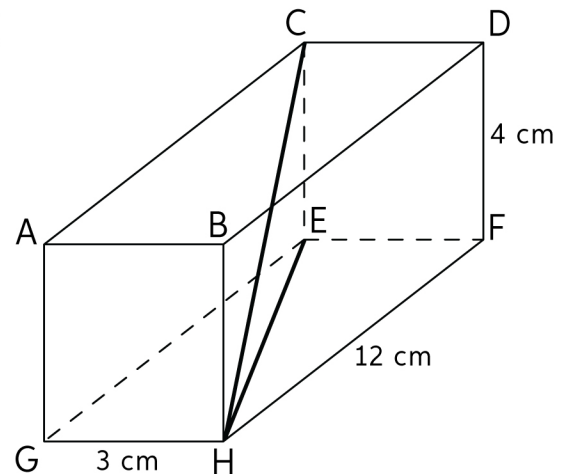
②



$$QS = \underline{\hspace{2cm}}$$

$$QM = \underline{\hspace{2cm}}$$

③

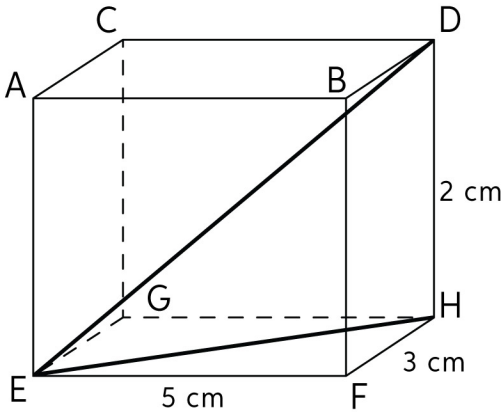


$$HE = \underline{\hspace{2cm}}$$

$$HC = \underline{\hspace{2cm}}$$

Pythagoras' Theorem in 3D

Answers



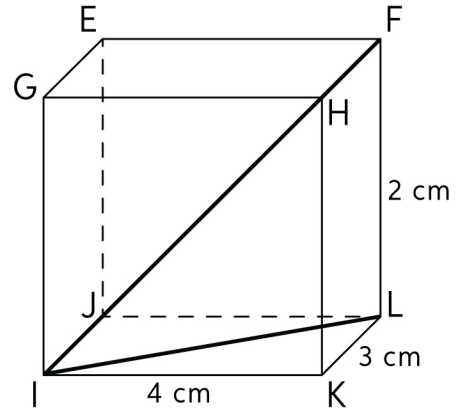
$$EH = \sqrt{(5)^2 + (3)^2}$$

$$= \underline{5.83 \text{ cm}}$$

$$ED = \sqrt{(\sqrt{34})^2 + (2)^2}$$

$$= \underline{6.16 \text{ cm}}$$

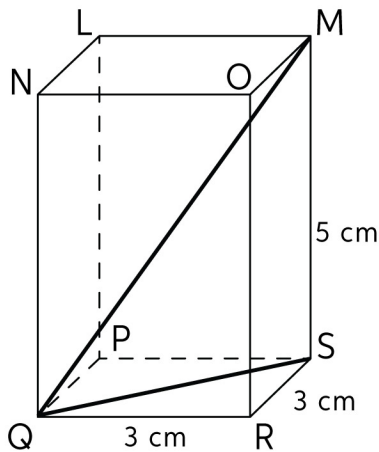
①



$$IL = \underline{5 \text{ cm}}$$

$$IF = \underline{5.39 \text{ cm}}$$

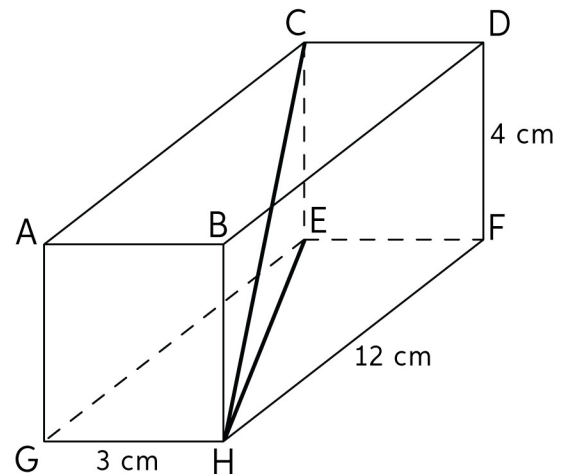
②



$$QS = \underline{4.24 \text{ cm}}$$

$$QM = \underline{6.56 \text{ cm}}$$

③



$$HE = \underline{12.37 \text{ cm}}$$

$$HC = \underline{13 \text{ cm}}$$