

# Measurement & Geometry Assessment

ACMMG242 (E)



Name: \_\_\_\_\_

Score: \_\_\_\_\_

Teacher: \_\_\_\_\_



Assessment



Navigator



Student



30 min

Q.1. A rectangular box 8 cm x 12 cm x 5 cm has volume:

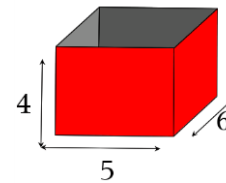
- a) 25 cm      b)  $392 \text{ cm}^2$       c)  $480 \text{ cm}^2$       d)  $960 \text{ cm}^2$       e) None of these

Q.2. A rectangular box 7 cm x 8 cm x 5 cm has total surface area:

- a) 30 cm      b)  $131 \text{ cm}^2$       c)  $262 \text{ cm}^2$       d)  $280 \text{ cm}^2$       e)  $280 \text{ cm}^3$

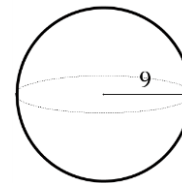
Q.3. A rectangular box (shown below) without a lid measuring 4 cm x 5 cm x 6 cm has a total external surface area:

- a) 15 cm      b)  $118 \text{ cm}^2$       c)  $120 \text{ cm}^2$   
d)  $148 \text{ cm}^2$       e)  $240 \text{ cm}^2$



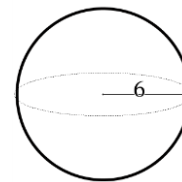
Q.4. A sphere of radius 9 cm has volume:

- a)  $81\pi \text{ cm}^3$       b)  $324\pi \text{ cm}^2$       c)  $729 \text{ cm}^3$   
d)  $729\pi \text{ cm}^3$       e)  $972\pi \text{ cm}^3$



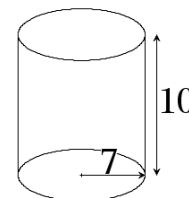
Q.5. A sphere of radius 6 cm has surface area:

- a)  $12\pi \text{ cm}^2$       b)  $36 \text{ cm}^2$       c)  $36\pi \text{ cm}^2$   
d)  $144\pi \text{ cm}^2$       e)  $288\pi \text{ cm}^2$



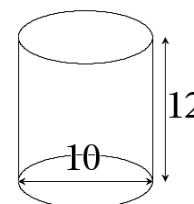
Q.6. A cylinder radius 7 cm and height 10 cm has volume:

- a)  $70 \text{ cm}^3$       b)  $70\pi \text{ cm}^3$       c)  $140\pi \text{ cm}^3$   
d)  $490 \text{ cm}^3$       e)  $490\pi \text{ cm}^3$



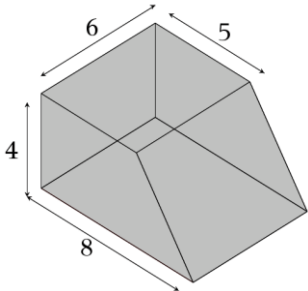
Q.7. A cylinder of diameter 10cm and height 12cm has surface area:

- a)  $145\pi \text{ cm}^2$       b)  $170\pi \text{ cm}^2$       c)  $240\pi \text{ cm}^2$   
d)  $340\pi \text{ cm}^2$       e)  $440\pi \text{ cm}^2$



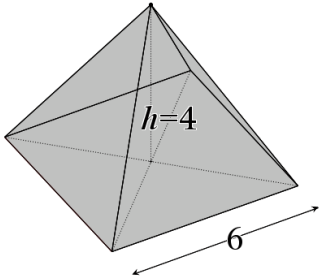
Q.8. Determine the volume of the shape below using the measurements provided.

Four horizontal lines for writing the answer to Q.8.



Q.9. Determine the total surface area of the square based pyramid shown below using the measurements provided.

Four horizontal lines for writing the answer to Q.9.



Q.10. The shape below consists of a square based pyramid on top of a box. Use the measurements provided to determine the total surface area.

Four horizontal lines for writing the answer to Q.10.

