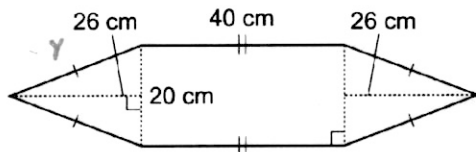


Determine the **area** and **perimeter** of each composite figure. Show all your work in the space provided. Part marks may be awarded.



Slant Height (triangle)

$$y^2 = 26^2 + 20^2$$

$$y^2 = 776$$

$$y = 27.9$$

$$y \approx 28 \text{ cm}$$

Perimeter

$$P = 4(28) + 2(40)$$

$$P = 192 \text{ cm}$$

Area (2 Δ 's, rect)

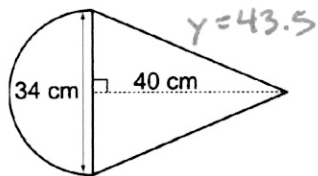
$$A_{\Delta} = \frac{1}{2}(20)(26)$$

$$= 260 \text{ cm}^2$$

$$A_{\text{Total}} = 2(260) + (40)(20)$$

$$= 520 + 800$$

$$= 1320 \text{ cm}^2$$



Slant height

$$y^2 = 40^2 + 17^2$$

$$y^2 = 1600 + 289$$

$$y^2 = 1889$$

$$y \approx 43.5 \text{ cm}$$

Perimeter

$$P = 43.5 + 43.5 + \text{half circle}$$

$$P = 87 + \frac{2\pi r}{2}$$

$$P = 87 + \pi(17)$$

$$P = 140.4 \text{ cm}$$

Area (half circle, Δ)

$$A_{\Delta} = \pi r^2$$

$$A_{\text{half circle}} = \frac{\pi r^2}{2}$$

$$A_{\text{Total}} = \frac{\pi(17)^2}{2} + \frac{1}{2}(34)(40)$$

$$A_{\text{Total}} = 453.7 + 680$$

$$A_{\text{Total}} = 1133.7 \text{ cm}^2$$