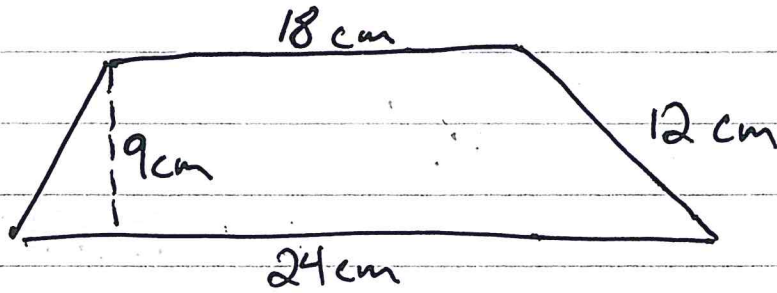


Ch. 10 test review

Key

1) Find the area of

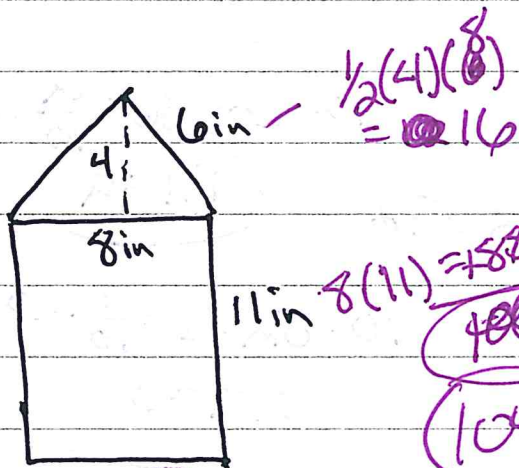


$$\frac{1}{2}(18+24)(9)$$

$$\frac{1}{2}(42)(9)$$
~~$$\frac{1}{2}(18+24)(9)$$~~
~~$$\frac{1}{2}(42)(9)$$~~

$$189 \text{ cm}^2$$

2)



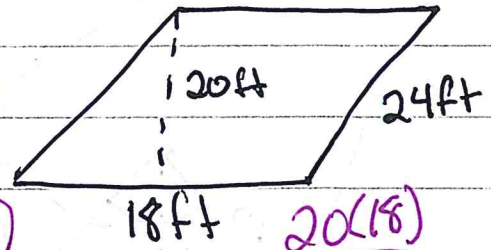
$$\frac{1}{2}(4)(8) = 16$$

$$8(11) = 88$$

~~$$104 \text{ in}^2$$~~

$$104 \text{ in}^2$$

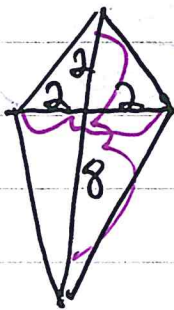
3)



$$20(18)$$

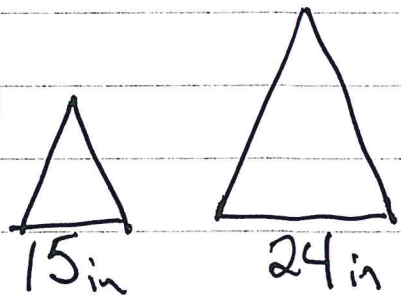
$$360 \text{ ft}^2$$

4)



$$\frac{1}{2}(4)(10) = 20 \text{ u}^2$$

5)

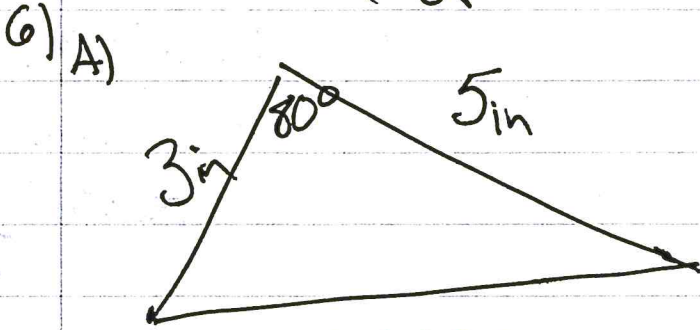


Find perimeter and area ratio

$$\frac{15}{24} = \frac{5}{8} = \text{per.}$$

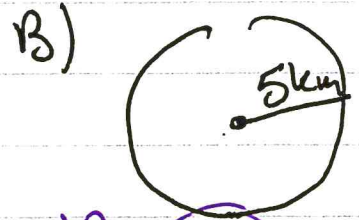
$$\frac{25}{64} = \text{area ratio}$$

6) Find area of



$$\frac{1}{2}(3)(5)\sin 80$$

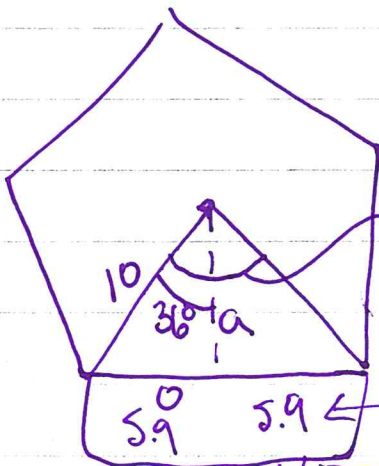
$$7.4 \text{ in}^2$$



$$\pi(5)^2 = 25\pi$$

or 78.5 km^2

7) pentagon with radius of 10 m



$$360/5 = 72$$

$$10 \cdot \cos 36 = \frac{a}{10} \cdot 10$$

$$8.1 = a$$

$$10 \cdot \sin 36 = \frac{s}{10} \cdot 10$$

$$5.9 = s$$

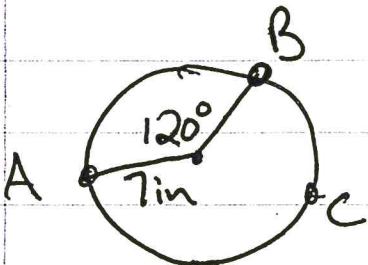
$$P = 11.8 \cdot 5$$

$$57.5$$

$$\frac{1}{2}(57.5)(8.1)$$

$$= 232.9 \text{ m}^2$$

8) Name a major arc and find its measure



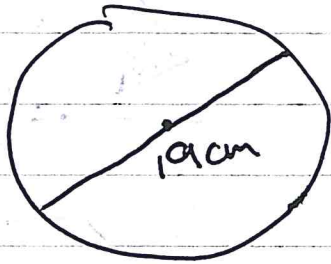
\widehat{ACB} or \widehat{BCA}

$$360 - 120 = 240^\circ$$

9) Find \widehat{ACB} in terms of π

$$\frac{240}{360} \cdot 2\pi(7) = \frac{2}{3} \cdot 14\pi = \frac{28\pi}{3} \text{ in}$$

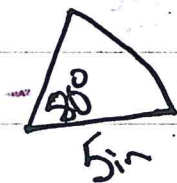
10) Find circumference of



in terms of π

$$\pi d \quad \text{or} \quad \boxed{19\pi \text{ cm}}$$

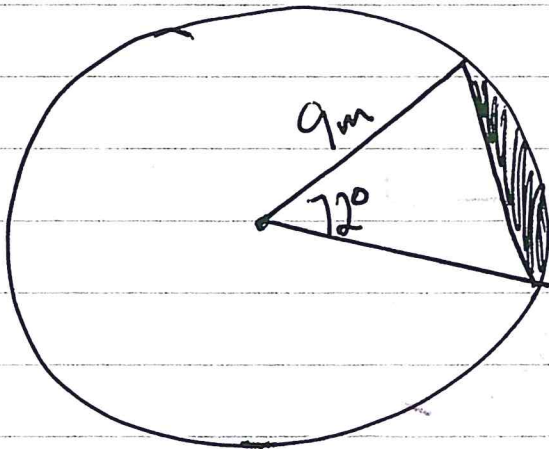
11) Find area of slice (sector)



$$\frac{50}{360} \cdot \pi (5)^2$$

$$\frac{2}{9} \cdot 25\pi = \boxed{\frac{50\pi}{9} \text{ in}^2}$$

12)



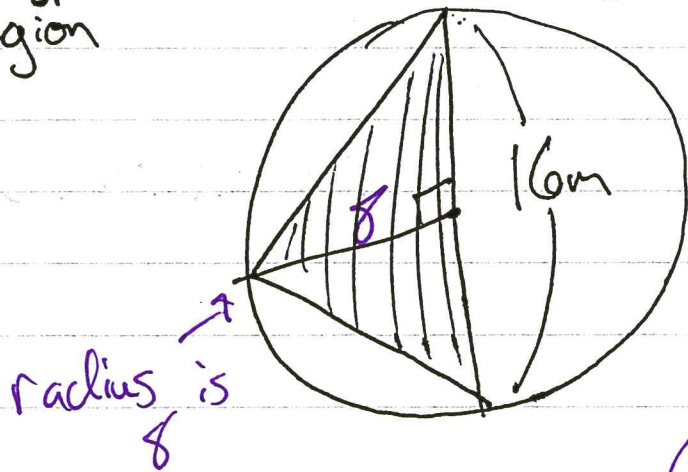
Find area of shaded

$$\begin{aligned} \text{Sector} &= \frac{72}{360} \cdot \pi (9)^2 \\ &= \frac{1}{5} \pi \cdot 81 \\ &= \frac{81\pi}{5} \end{aligned}$$

$$\begin{aligned} \text{Triangle} &= \frac{1}{2} (9)(9) \sin 72 \\ &= 38.5 \end{aligned}$$

$$\text{Shaded Area} = \boxed{\frac{81\pi}{5} - 38.5 \text{ m}^2}$$

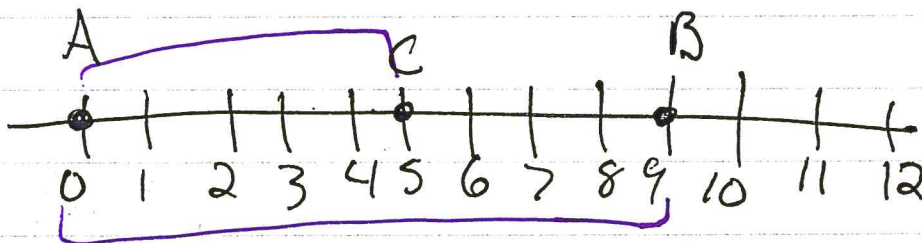
13) Find prob of landing on shaded region



$$\frac{\text{Area of Sector}}{\text{Area of Circle}} = \frac{\frac{1}{2}(8)(16)}{\pi(8)^2} = \frac{64}{64\pi}$$

$$\frac{64}{64\pi} = \frac{1}{\pi}$$

14) Find prob of point being chosen on AC



$$\frac{5}{9}$$