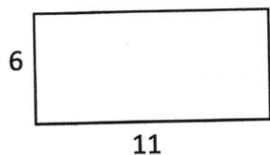


Geometry
Unit 10: Area Test Review

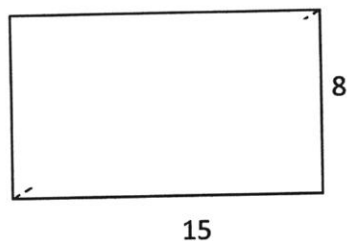
Name: _____

Find the area of the following figures:

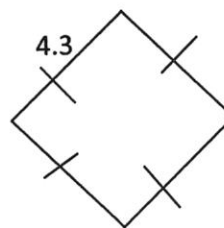
1. $A =$ _____



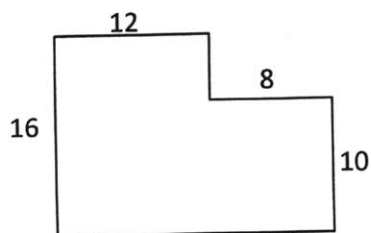
2. $A =$ _____



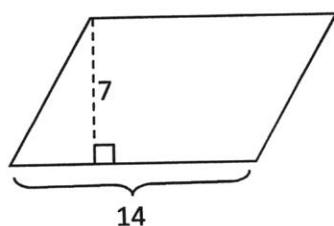
3. $A =$ _____



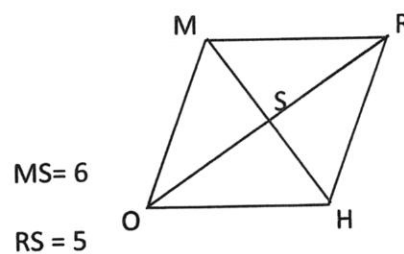
4. $A =$ _____



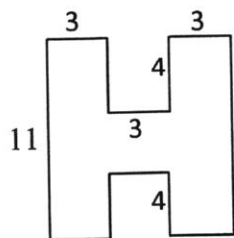
5. $A =$ _____



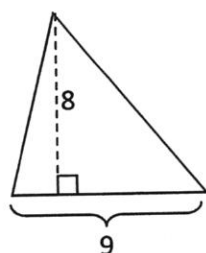
6. $A =$ _____



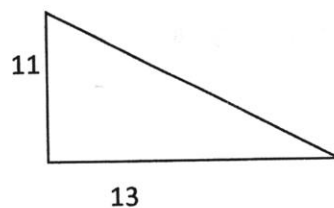
7. $A =$ _____



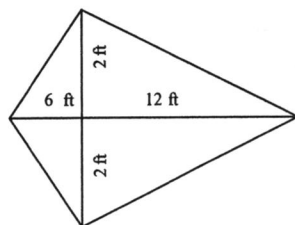
8. $A =$ _____



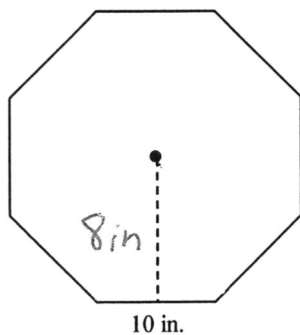
9. $A =$ _____



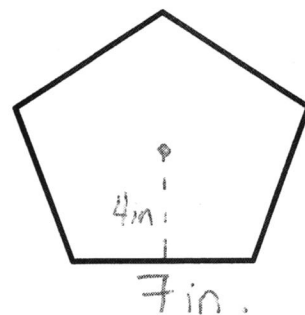
10. $A =$ _____



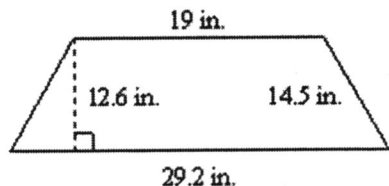
11. $A =$ _____



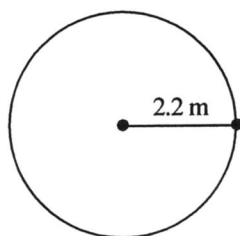
12. $A =$ _____



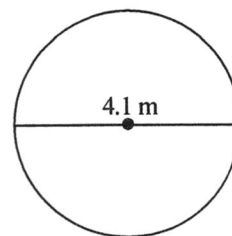
13. $A =$ _____



14. $A =$ _____



15. $A =$ _____



16. The area of a parallelogram is 280 cm^2 and the height is 35 cm. Find the corresponding base.

A. 315 cm

B. 245 cm

C. $9,800 \text{ cm}^2$

D. 8 cm

17. A kite has diagonals 13 ft and 6 ft. What is the area of the kite?

18. Find the area of a regular hexagon with an apothem 17.3 miles long and a side 20 miles long. Round your answer to the nearest tenth.

A. 173.2 mi^2

B. 2078.5 mi^2

C. 692.8 mi^2

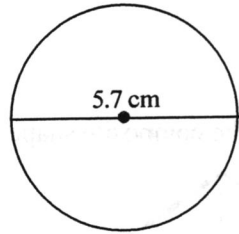
D. 1038 mi^2

19. What is the area of a square with a side length of 13 ft

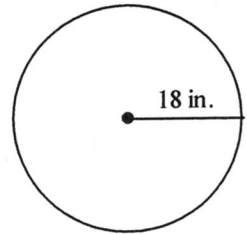
- A. 676 ft^2 B. 169 ft^2 C. 338 ft^2 D. 343 ft^2

Find the circumference.

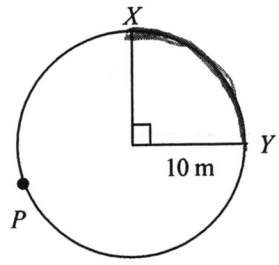
20.



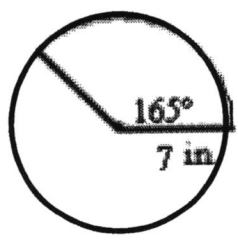
21.



22. Find the arclength of \widehat{XY} .

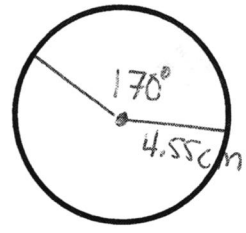


20. Find the area of the sector to the nearest tenth.

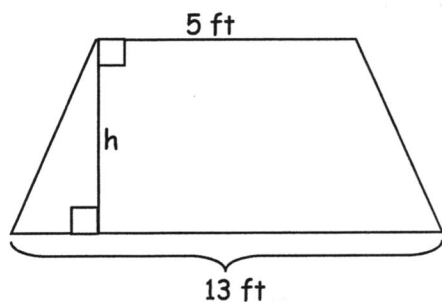


21. Find the area of a sector with a central angle of 170° and a radius of 4.55 cm. Round to the nearest tenth.

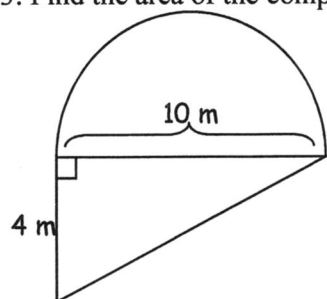
- A. 122.9 cm^2 B. 30.7 cm^2 C. 8.6 cm^2 D. 3.4 cm^2



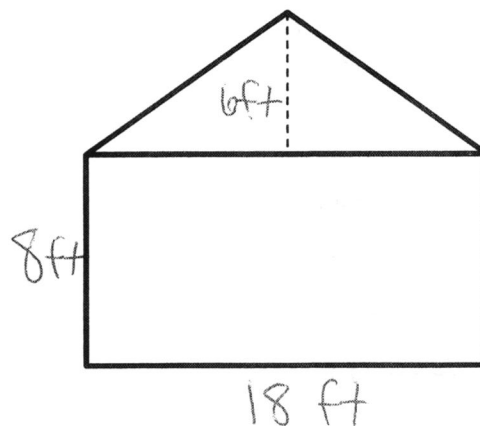
22. If the Area = 36 ft^2 , find the measure of the height.



23. Find the area of the composite shape



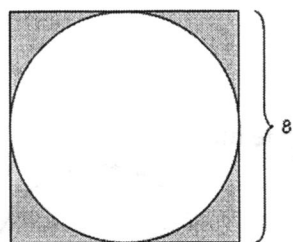
24. Find the area of the composite shape



25. A square has an area of 196 in^2 . What is the length of one of its sides?

26. The area of a triangle is 45 cm^2 . If the height is 5 cm, what is the base of the triangle?

27. What is the area of the shaded region?

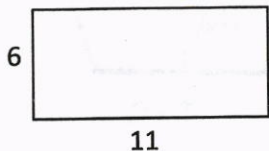


Geometry
Unit 10: Area Test Review

Name: _____

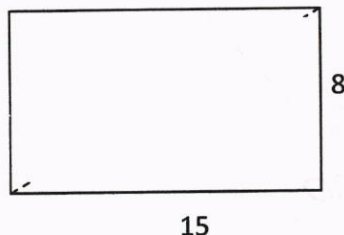
Find the area of the following figures:

1. A = 66 u^2



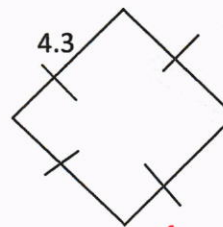
6×11

2. A = 120 u^2



8×15

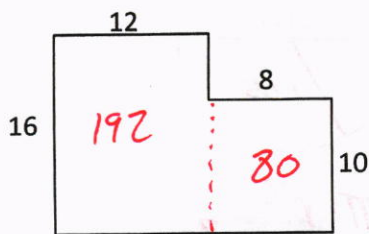
3. A = 18.49 u^2



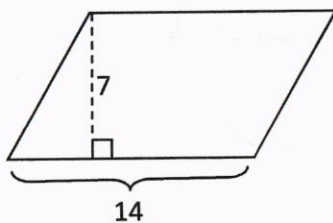
Supposed to be a square

4.3×4.3

4. A = 272 u^2

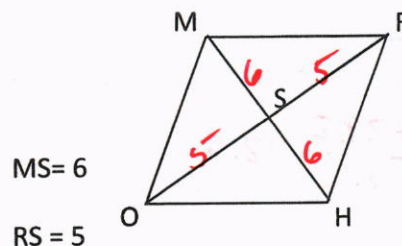


5. A = 98 u^2



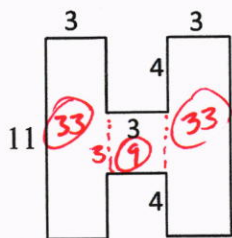
7×14

6. A = 60 u^2



$\frac{1}{2} \times 12 \times 10$

7. A = 72 u^2

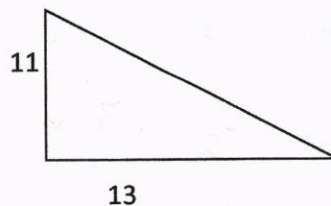


8. A = 36 u^2



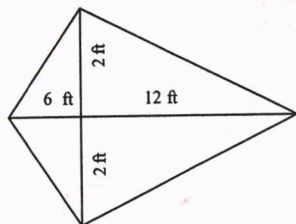
$\frac{1}{2} \times 8 \times 9$

9. A = 71.5 u^2



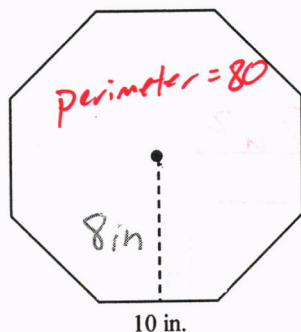
$\frac{1}{2} \times 11 \times 13$

10. A = 36 ft²



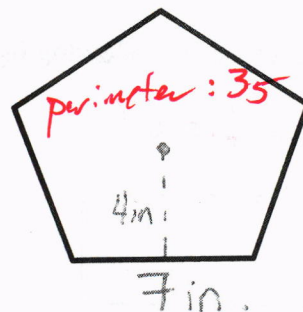
$\frac{1}{2} \times 18 \times 4$

11. A = 320 m²



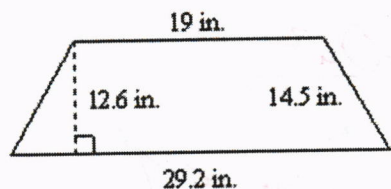
$\frac{1}{2} \cdot 8 \cdot 80$

12. A = 70 in²



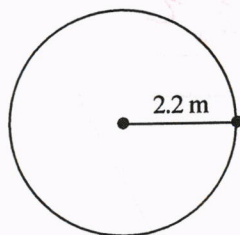
$\frac{1}{2} \cdot 4 \cdot 35$

13. A = 303.66 in²



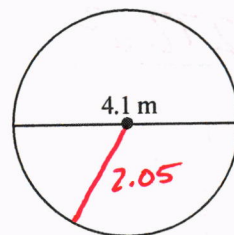
$\frac{19 + 29.2}{2} \cdot 12.6$

14. A = 15.2 m²



πr^2
 $\pi \cdot 2.2^2$

15. A = 13.2 m²



$\pi \cdot r^2$
 $\pi \cdot 2.05^2$

16. The area of a parallelogram is 280 cm² and the height is 35 cm. Find the corresponding base.
A. 315 cm B. 245 cm C. 9,800 cm² D. 8 cm

Area = b * h
280 = b * 35
8 = b

17. A kite has diagonals 13 ft and 6 ft. What is the area of the kite?

$\frac{1}{2} \cdot 13 \cdot 6 = 39 \text{ ft}^2$

18. Find the area of a regular hexagon with an apothem 17.3 miles long and a side 20 miles long. Round your answer to the nearest tenth.

A. 173.2 mi²

B. 2078.5 mi²

C. 692.8 mi²

D. 1038 mi²

$\frac{1}{2} \cdot 17.3 \cdot 120$

perimeter = 20 * 6
= 120

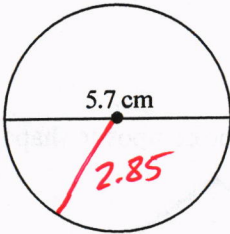
19. What is the area of a square with a side length of 13 ft

13×13

- A. 676 ft^2 B. 169 ft^2 C. 338 ft^2 D. 343 ft^2

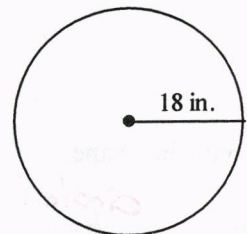
Find the circumference. $C = 2\pi r$

20.



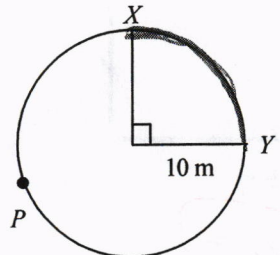
$\approx 17.9 \text{ cm}$

21.



$2 \cdot 18 \cdot 3.14 \approx 113.04 \text{ in}$

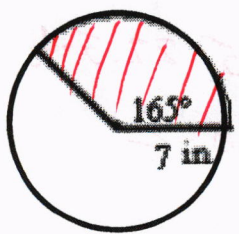
22. Find the arclength of \widehat{XY} .



$2\pi r \cdot \frac{\text{angle}}{360}$

$2 \cdot 3.14 \cdot 10 \cdot \frac{90}{360} \approx 15.7 \text{ m}$

20. Find the area of the sector to the nearest tenth.



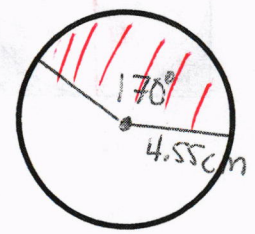
$\pi r^2 \cdot \frac{\text{angle}}{360}$

$3.14 \cdot 7^2 \cdot \frac{165}{360} \approx 70.5 \text{ in}^2$

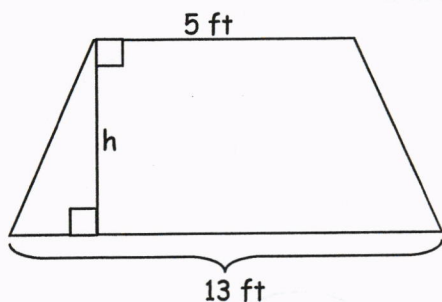
21. Find the area of a sector with a central angle of 170° and a radius of 4.55 cm. Round to the nearest tenth.

- A. 122.9 cm^2 B. 30.7 cm^2 C. 8.6 cm^2 D. 3.4 cm^2

$3.14 \cdot 4.55^2 \cdot \frac{170}{360} \approx 30.7$



22. If the Area = 36 ft^2 , find the measure of the height.



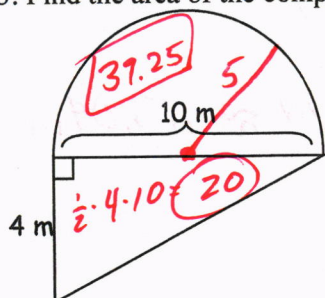
$$\text{Area} = \frac{b_1 + b_2}{2} \cdot h$$

$$36 = \frac{5 + 13}{2} \cdot h$$

$$36 = 9h$$

$$4 = h$$

23. Find the area of the composite shape



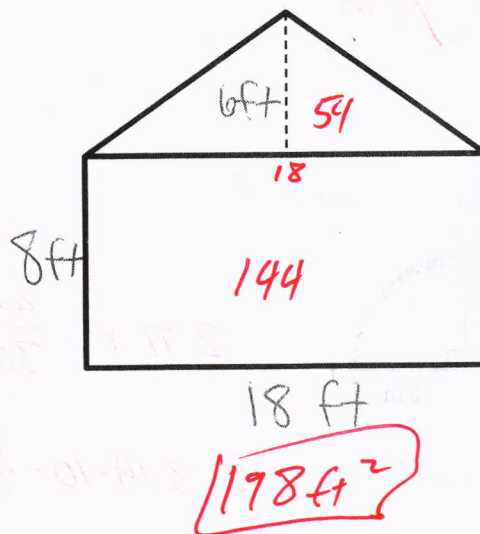
circle:

$$\text{half of } \pi \cdot 5^2$$

$$\text{half of } 78.5 = 39.25$$

$$59.25 \text{ m}^2$$

24. Find the area of the composite shape



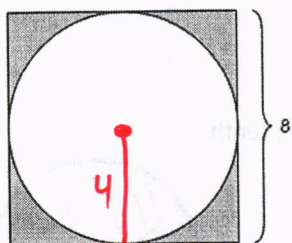
25. A square has an area of 196 in^2 . What is the length of one of its sides?

$$x^2 = 196 \rightarrow x = 14 \rightarrow 14 \times 14 = 196$$

26. The area of a triangle is 45 cm^2 . If the height is 5 cm, what is the base of the triangle?

$$\text{Area} = \frac{1}{2} \times b \times h \rightarrow 45 = \frac{1}{2} \cdot b \cdot 5 \rightarrow 45 = 2.5 \cdot b \rightarrow b = 2$$

27. What is the area of the shaded region?



$$8 \times 8 - \pi \cdot 4^2$$

$$64 - 50.24 = 13.76$$