

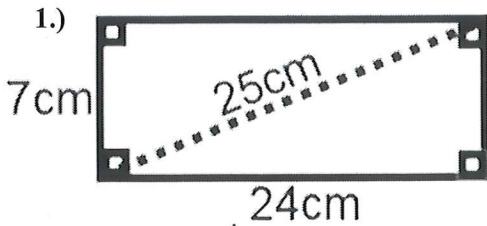
Geometry

Chapter 8 Review

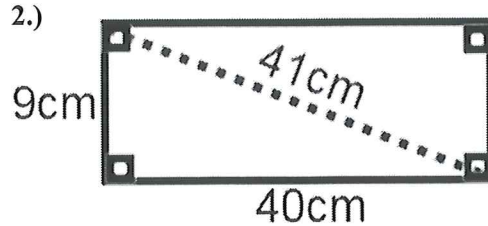
Find the area of the given shapes.

Name: Kay

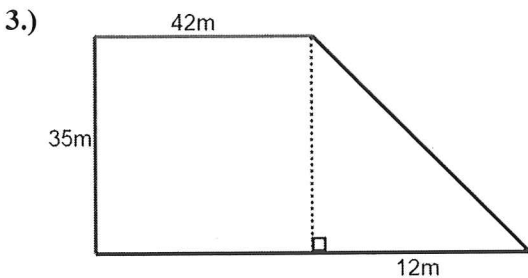
Date: \_\_\_\_\_ Period: \_\_\_\_\_



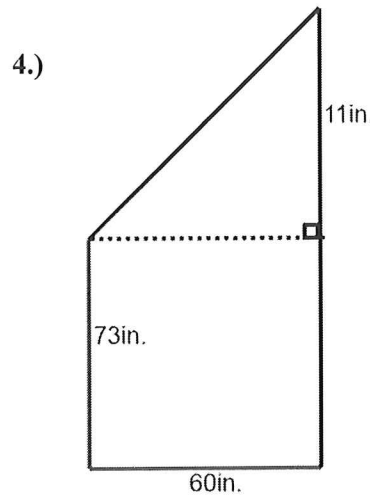
$$A = bh$$
$$A = (24)7$$
$$A = 168\text{cm}^2$$



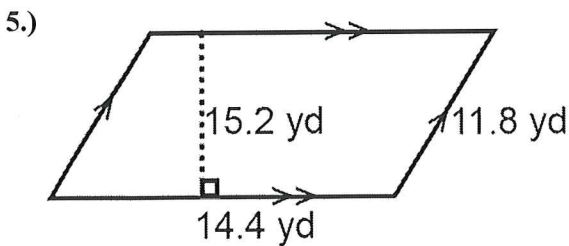
$$A = bh$$
$$A = (40)(9)$$
$$A = 360\text{cm}^2$$



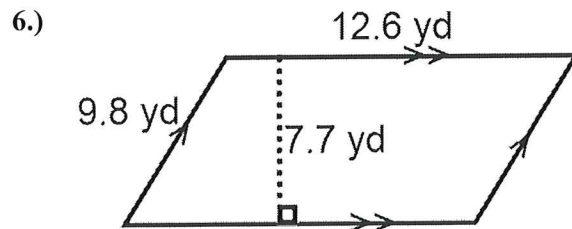
$$A = \frac{1}{2}h(b_1 + b_2)$$
$$A = \frac{1}{2}(35)(42 + 54)$$
$$A = 1680\text{cm}^2$$



$$A = \frac{1}{2}(h)(b_1 + b_2)$$
$$A = \frac{1}{2}(60)(73 + 84)$$
$$A = 4710\text{in}^2$$



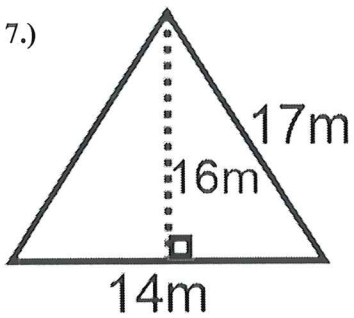
$$A = bh$$
$$A = (14.4)(15.2)$$
$$A = 218.88\text{yd}^2$$



$$A = bh$$
$$A = (12.6)(7.7)$$
$$A = 97.02\text{yd}^2$$

Find the area of the given shapes.

7.)

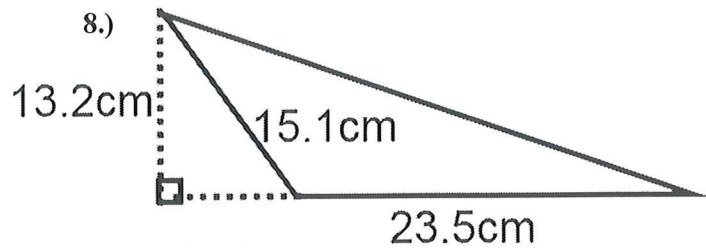


$$A = \frac{1}{2}bh$$

$$A = \frac{1}{2}(14)(16)$$

$$A = 112 \text{ m}^2$$

8.)

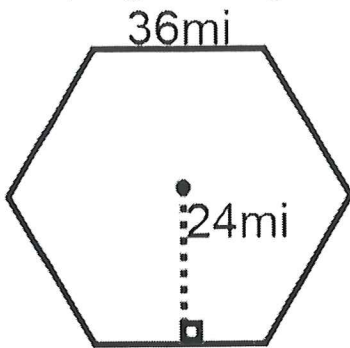


$$A = \frac{1}{2}bh$$

$$A = \frac{1}{2}(23.5)(13.2)$$

$$A = 155.1 \text{ cm}^2$$

9.) Regular Hexagon

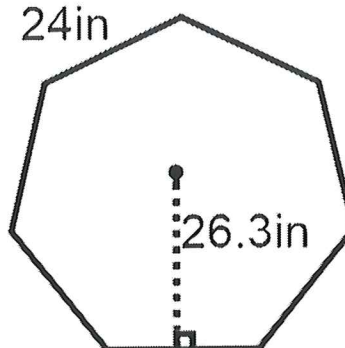


$$A = \frac{n}{2}(s)(a)$$

$$A = \frac{6}{2}(36)(24)$$

$$A = 2592 \text{ mi}^2$$

10.) Regular Heptagon

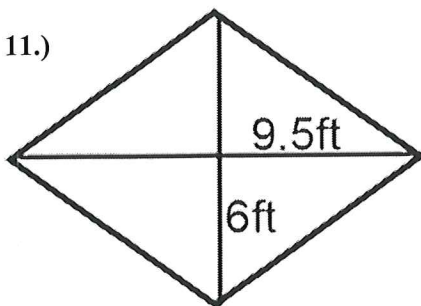


$$A = \frac{n}{2}(s)(a)$$

$$A = \frac{7}{2}(24)(26.3)$$

$$A = 2209.2 \text{ in}^2$$

11.)

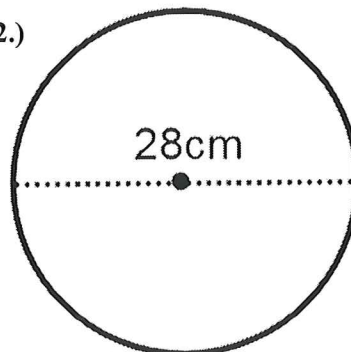


$$A = \frac{1}{2}d_1d_2$$

$$A = \frac{1}{2}(19)(12)$$

$$A = 114 \text{ ft}^2$$

12.)



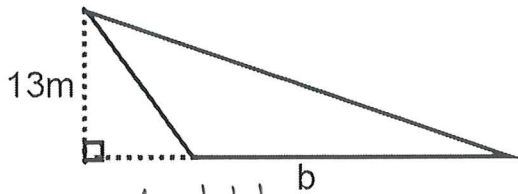
$$A = \pi r^2$$

$$A = \pi(14)^2$$

$$A = 196\pi \text{ cm}^2 \approx 615.75 \text{ cm}^2$$

Find missing dimension given the following.

13.)  $A = 104m^2$



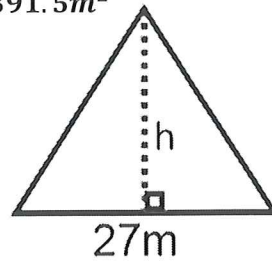
$$A = \frac{1}{2}bh$$

$$104 = \frac{1}{2}b(13)$$

$$104 = 6.5b$$

$$16m = b$$

14.)  $A = 391.5m^2$



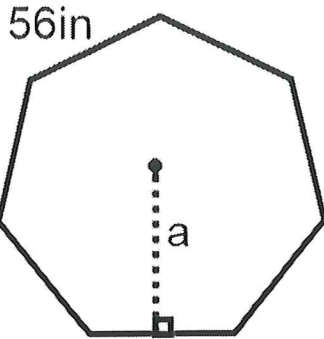
$$A = \frac{1}{2}bh$$

$$391.5 = \frac{1}{2}(27)h$$

$$391.5 = 13.5h$$

$$29 = h$$

15.) Regular Heptagon,  $A = 8820in^2$ .



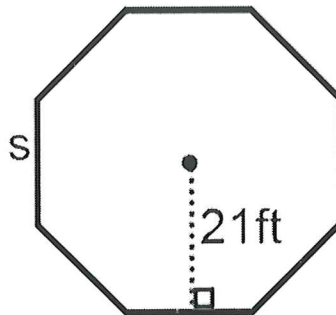
$$A = \frac{n}{2}(a)(s)$$

$$8820 = \frac{7}{2}a(56)$$

$$8820 = 196a$$

$$45in = a$$

16.) Regular Octagon.  $A = 3360ft^2$ .



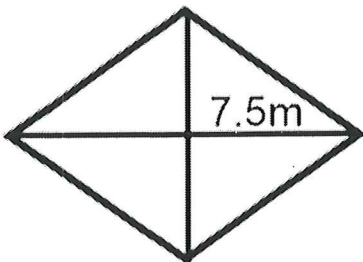
$$A = \frac{n}{2}(s)(a)$$

$$3360 = \frac{8}{2}S(21)$$

$$3360 = 84s$$

$$40ft = s$$

17.)  $A = 135m^2$ , find the other diagonal.



$$d_1 = 15$$

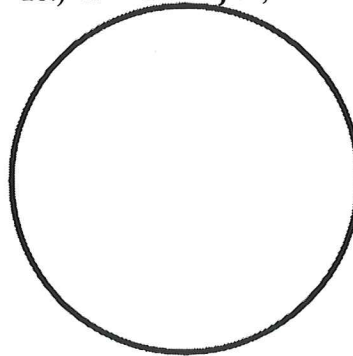
$$A = \frac{1}{2}d_1d_2$$

$$135 = \frac{1}{2}(15)d_2$$

$$270 = 15d_2$$

$$18 = d_2$$

18.)  $A = 121\pi ft^2$ , find the circumference.



$$A = \pi r^2$$

$$121\pi = \pi r^2$$

$$121 = r^2$$

$$11 = r$$

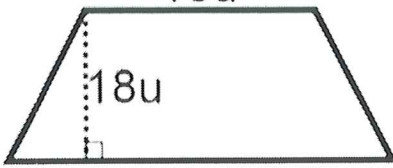
$$C = 2\pi r$$

$$C = 2\pi(11)$$

$$C = 22\pi ft \approx 69.12ft$$

Find missing dimension given the following.

19.)  $A = 333u^2$



$b_2$

$$A = \frac{1}{2}h(b_1 + b_2)$$

$$333 = \frac{1}{2}(18)(13 + b_2)$$

$$333 = 9(13 + b_2)$$

$$37 = 13 + b_2$$

$$24u = b_2 \rightarrow$$

21.) The area of a square is  $169ft^2$ . Find the perimeter of the square.

$$A = bh \text{ or } A = s^2$$

$$169 = s^2$$

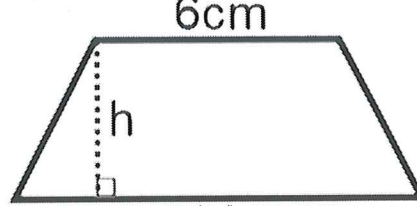
$$13 = s \text{ ft}$$

$$1 \quad P = 4s$$

$$1 \quad P = 4(13)$$

$$1 \quad P = 52 \text{ ft}$$

20.)  $A = 170cm^2$



$14cm$

$$A = \frac{1}{2}h(b_1 + b_2)$$

$$A = \frac{1}{2}h(6 + 14)$$

$$170 = 10h$$

$$17cm = h$$

22.) The area of a rectangle is  $147m^2$  and the width is  $7cm$ . Find the length.

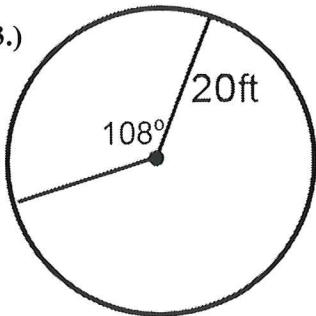
$$A = bh \text{ or } A = Lw$$

$$147 = 7(L)$$

$$21m = L$$

Find the area of the following sectors.

23.)

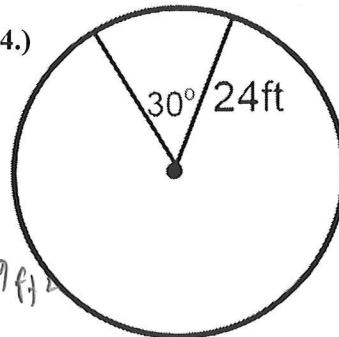


$$A = \frac{\angle}{360} \cdot \pi r^2$$

$$A = \frac{108}{360} \pi (20)^2$$

$$A = 120\pi \text{ ft}^2 \approx 376.99 \text{ ft}^2$$

24.)



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

$$A = \frac{30}{360} \cdot \pi (24)^2$$

$$A = 48\pi \text{ ft}^2 \approx 150.80 \text{ ft}^2$$

25.) The scale factor of  $\triangle AND$  to  $\triangle FOR$  is  $7:9$ . What is the ratio of the area of  $\triangle AND$  to the area of  $\triangle FOR$ ?

$$7^2 : 9^2$$

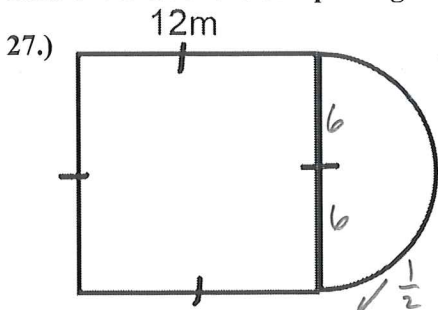
$$49 : 81$$

26.) The scale factor of  $\triangle BOT$  to  $\triangle ALD$  is  $5:7$ . What is the ratio of the area of  $\triangle BOT$  to the area of  $\triangle ALD$ ?

$$5^2 : 7^2$$

$$25 : 49$$

Find the area of the complex figures.

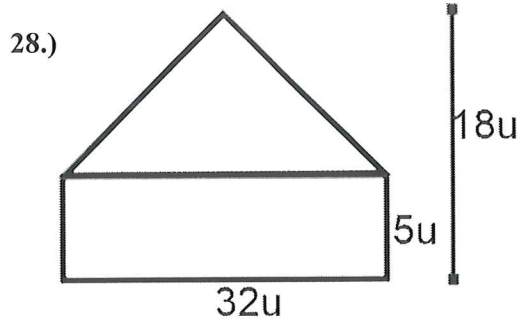


$$A = \square + \text{半圆}$$

$$A = 12^2 + \frac{1}{2} \pi 6^2$$

$$A = 144 + 18\pi \text{ m}^2$$

$$A \approx 200.55 \text{ m}^2$$

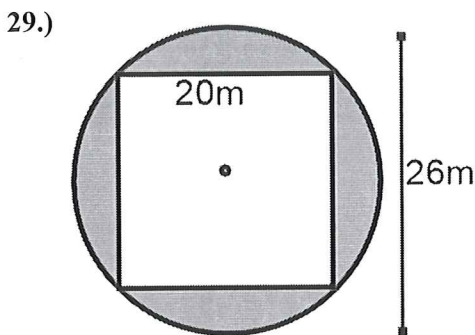


$$A = \text{矩形} + \triangle$$

$$A = 32(5) + \frac{1}{2}(32)(18)$$

$$A = 368 \text{ u}^2$$

Find the area of the shaded region.

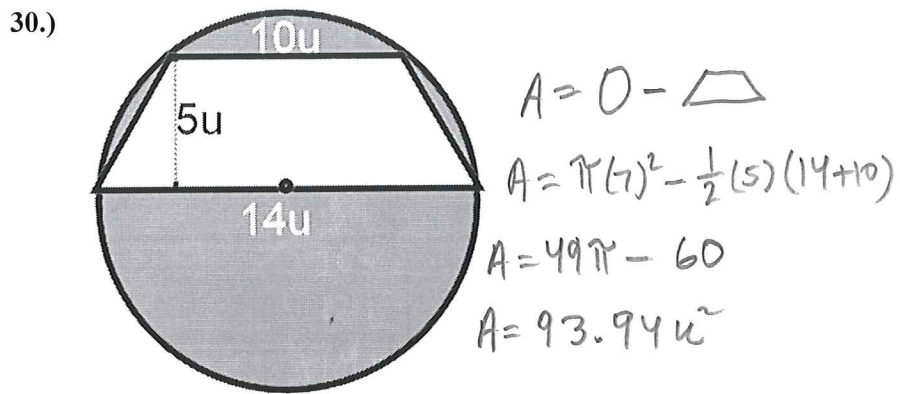


$$A = \text{圆} - \square$$

$$A = \pi (13)^2 - 20^2$$

$$A = 169\pi - 400 \text{ m}^2$$

$$A = 130.93 \text{ m}^2$$

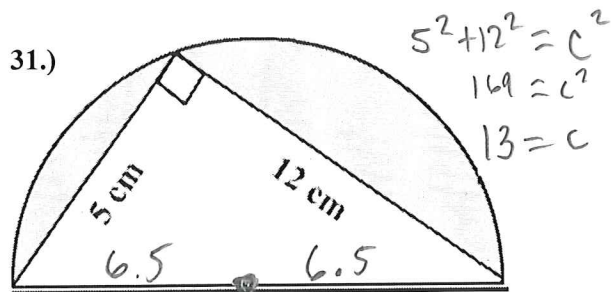


$$A = \text{圆} - \text{梯形}$$

$$A = \pi (7)^2 - \frac{1}{2}(5)(14+10)$$

$$A = 49\pi - 60$$

$$A = 93.94 \text{ u}^2$$



$$5^2 + 12^2 = c^2$$

$$169 = c^2$$

$$13 = c$$

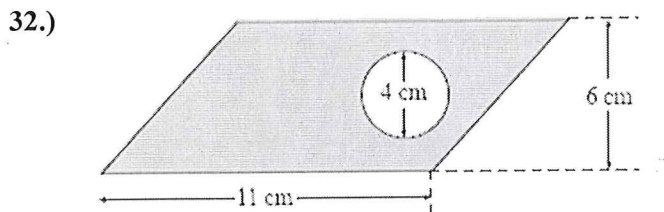
$$A = \text{半圆} - \triangle$$

$$A = \frac{1}{2}[\pi(6.5)^2] - \frac{1}{2}(5)(12)$$

$$A = \frac{1}{2}[42.28\pi] - 30$$

$$A = 21.13\pi - 30 \text{ cm}^2$$

$$A \approx 36.38 \text{ cm}^2$$



$$A = \text{平行四边形} - \text{圆}$$

$$A = 11(6) - \pi(2)^2$$

$$A = 66 - 4\pi \text{ cm}^2$$

$$A \approx 53.43 \text{ cm}^2$$