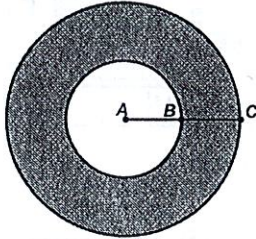


Name Key Date \_\_\_\_\_

## Area, Perimeter And Circumference Study Guide

Clicking on any box containing a problem will launch a video explaining how to solve that problem.

1. Calculate the shaded portion of the figure shown. Use 3.14 for pi.



$\overline{AB} = 1.5 \text{ in.}$

$\overline{BC} = 1.5 \text{ in.}$

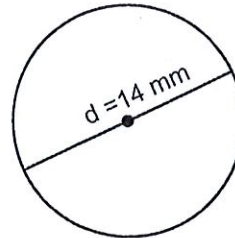
(a)  $28.26 \text{ in.}^2$

(b)  $21.195 \text{ in.}^2$

(c)  $18.84 \text{ in.}^2$

(d)  $15.752 \text{ in.}^2$

2. Find the area of the circle below. Use 3.14 for pi.



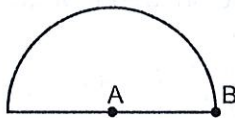
(a)  $615.44 \text{ mm}^2$

(b)  $153.86 \text{ mm}^2$

(c)  $43.96 \text{ mm}^2$

(d)  $21.98 \text{ mm}^2$

3. Calculate the area of the following semi-circle. Use 3.14 for pi.



$\overline{AB} = 6 \text{ in.}$

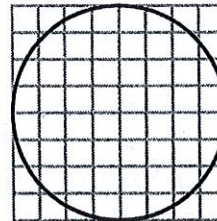
(a)  $18.84 \text{ in.}^2$

(b)  $56.52 \text{ in.}^2$

(c)  $64.42 \text{ in.}^2$

(d)  $116.04 \text{ in.}^2$

4. Find the area of the circle. Use 3.14 for pi.



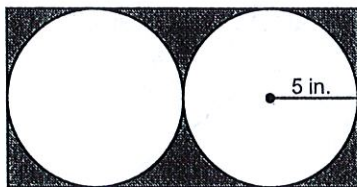
(a)  $12.56 \text{ units}^2$

(b)  $18.84 \text{ units}^2$

(c)  $25.12 \text{ units}^2$

(d)  $50.24 \text{ units}^2$

5. What is the area of the shaded section of the figure below?



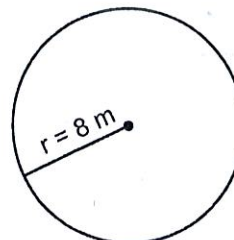
(a)  $43 \text{ in.}^2$

(b)  $86 \text{ in.}^2$

(c)  $122 \text{ in.}^2$

(d)  $134 \text{ in.}^2$

6. Find the area of the circle below. Use 3.14 for pi.



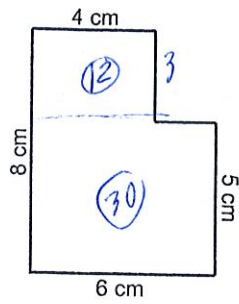
(a)  $200.96 \text{ m}^2$

(b)  $100.48 \text{ m}^2$

(c)  $50.24 \text{ m}^2$

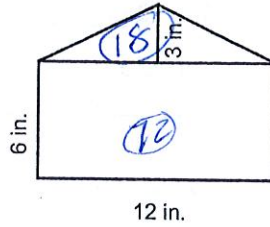
(d)  $25.12 \text{ m}^2$

7. Calculate the area of figure below.



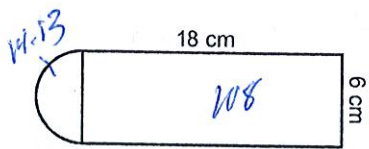
- (a)  $21 \text{ cm}^2$
- (b)  $23 \text{ cm}^2$
- (c)  $42 \text{ cm}^2$
- (d)  $48 \text{ cm}^2$

8. What is the area of the figure shown below?



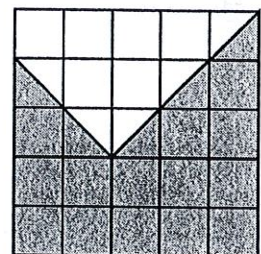
- (a)  $90 \text{ in.}^2$
- (b)  $108 \text{ in.}^2$
- (c)  $156 \text{ in.}^2$
- (d)  $216 \text{ in.}^2$

9. Study the figure below. **About** what is the area of the object?



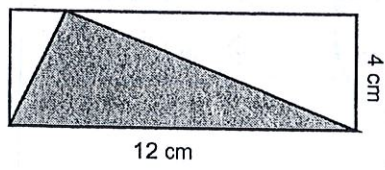
- (a)  $108 \text{ cm}^2$
- (b)  $112 \text{ cm}^2$
- (c)  $122 \text{ cm}^2$
- (d)  $130 \text{ cm}^2$

10. How many square units of the grid below is shaded?



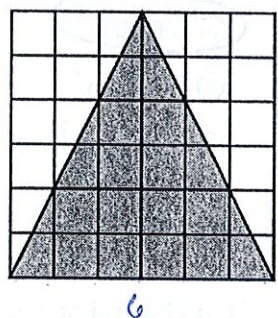
- (a) 21.5 square units
- (b) 16.5 square units
- (c) 12.5 square units
- (d) 9.5 square units

11. What is the area of the shaded triangle?



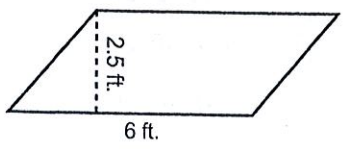
- (a)  $12 \text{ cm}^2$
- (b)  $24 \text{ cm}^2$
- (c)  $36 \text{ cm}^2$
- (d)  $48 \text{ cm}^2$

12. What is the area of the shaded triangle?



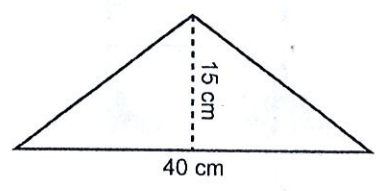
- (a) 10 square units
- (b) 12 square units
- (c) 16 square units
- (d) 18 square units

13. Find the area of the parallelogram.



- (a)  $7.5 \text{ ft.}^2$
- (b)  $15 \text{ ft.}^2$
- (c)  $18 \text{ ft.}^2$
- (d)  $21.5 \text{ ft.}^2$

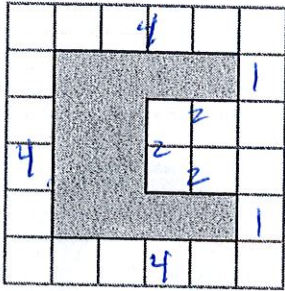
14. Calculate the area of the triangle.



- (a)  $600 \text{ cm}^2$
- (b)  $150 \text{ cm}^2$
- (c)  $450 \text{ cm}^2$
- (d)  $300 \text{ cm}^2$



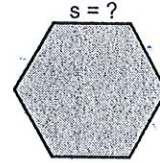
15. Find the perimeter of the object shown on the grid below.



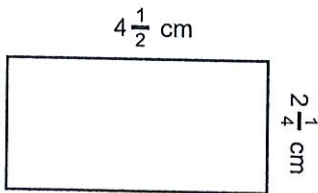
- (a) 18 units
- (b) 20 units
- (c) 21 units
- (d) 23 units

16. If the perimeter of the regular hexagon is 30 inches, what must be the length of each side?

- (a) 3 inches
- (b) 4 inches
- (c) 5 inches
- (d) 180 inches

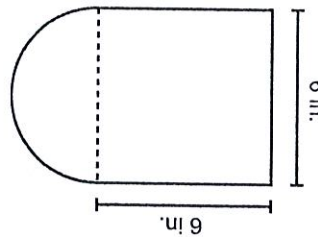


17. Calculate the perimeter of the following rectangle.



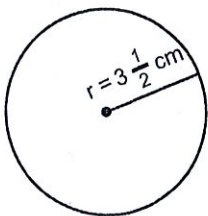
- (a)  $16 \frac{3}{4}$  cm
- (b)  $6 \frac{3}{4}$  cm
- (c)  $10 \frac{1}{8}$  cm
- (d)  $13 \frac{1}{2}$  cm

18. Find the perimeter of the object below.



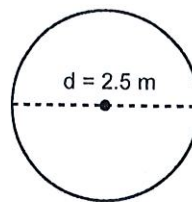
- (a) 27.42 inches
- (b) 36.84 inches
- (c) 18.84 inches
- (d) 20.12 inches

19. Find the circumference of the following circle. Use  $\frac{22}{7}$  for pi.



- (a) 22 cm
- (b) 16 cm
- (c) 11 cm
- (d) 30 cm

20. Find the circumference of the following circle. Use 3.14 for pi.



- (a) 4.24 m
- (b) 5.64 m
- (c) 6.75 m
- (d) 7.85 m