

Math 7 Unit 6 Geometry
Practice Test: Two-Dimensional Figures

Name _____

Date _____

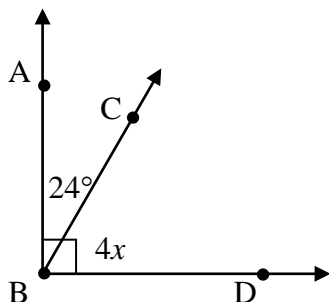
1) Define the terms below and give an example of each.

a. Area

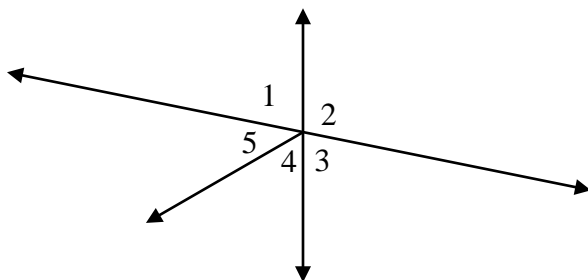
b. Two-Dimensional figures

c. Adjacent angles

2) Find the measure of x and the $m\angle DBC$. Show your work.



3) Find the measure of each angle in the diagram below, given $m\angle 4 = 51^\circ$ and $m\angle 5 = 45^\circ$.



4) For which plane figures does the formula $A=lw$ work? Circle all that apply.

- | | | | |
|-----------|---------------|---------|----------|
| trapezoid | rectangle | circle | triangle |
| square | parallelogram | rhombus | |

5) Find the circumference and area of a circle with radius = 14 inches. (Use $\frac{22}{7}$ for π)

6) Find the circumference and area of a circle with $r = 20$ inches. (Use 3.14 for π)

7) A circle has a circumference of 30π centimeters.

a. Find the area, in cm, of this circle.

b. What would be the area of a new circle that has an area 20% greater than the circle in Part a?

8) Joey wants to cover a wall in his bedroom with movie posters. The wall is 12 feet long and 9 feet tall.

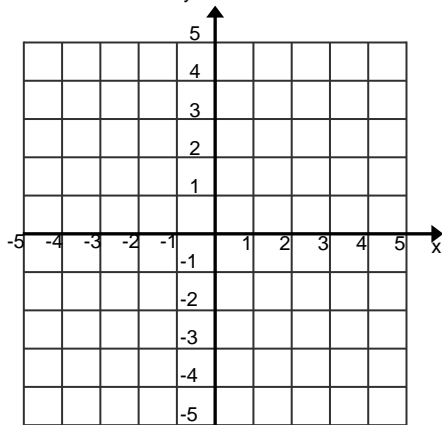
A) What is the area of the wall to be covered? _____

B) Joey owns a lot of movie posters, each one is 2 feet wide and 3 feet tall. How many posters will he be able to hang on the wall with no overlapping? Explain your thinking and show your work.



9) Give an informal derivation of (explain) the relationship between the circumference and area of a circle.

10) Graph and find the area of the figure with vertices $(-1, -1)$, $(0, 3)$, $(4, 3)$, $(5, -1)$

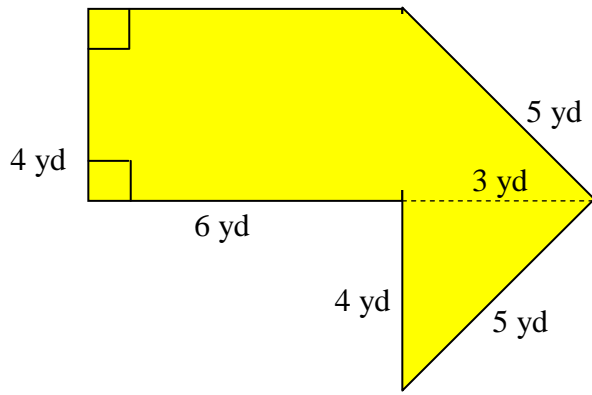


11) A square has an area of 121 units^2 . What is the perimeter of the square?

12) Which is the best estimate of the area of a circle with a diameter of 6 ft?

- a. 9 ft^2
- b. 18 ft^2
- c. 27 ft^2
- d. 108 ft^2

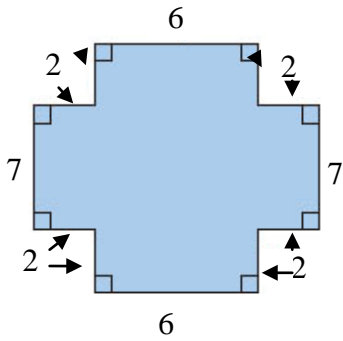
13) Find the perimeter and area of the figure below. Show your work.



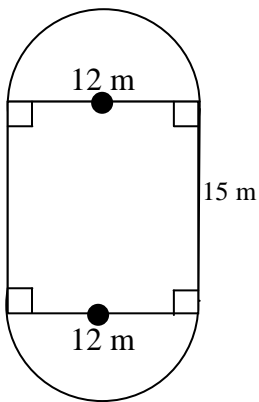
Perimeter = _____

Area = _____

14) Find the area of the shaded region. Show your work.



15) Find the area of this figure. Show your work.



- c. A parallelogram with opposite angles of 55° .

Long Term Memory Review

19) 13% of 930 is what?

20) Solve for n . $\frac{4.3}{6} = \frac{17.2}{n}$

21) Evaluate. $3^3 - 2(-5) - 4 =$

22) Simplify. $-15 \cdot \frac{2}{3} =$