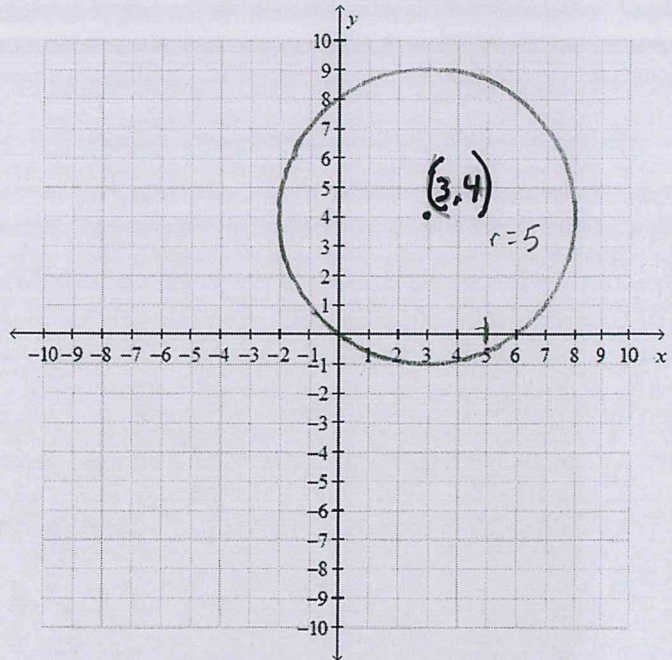


Grade 7/8 Math Drawing Circles and Triangles Practice Test

Name: Key Class: _____ Date: _____

1. Draw a circle with a radius of 5 units with a centre at point (3, 4).

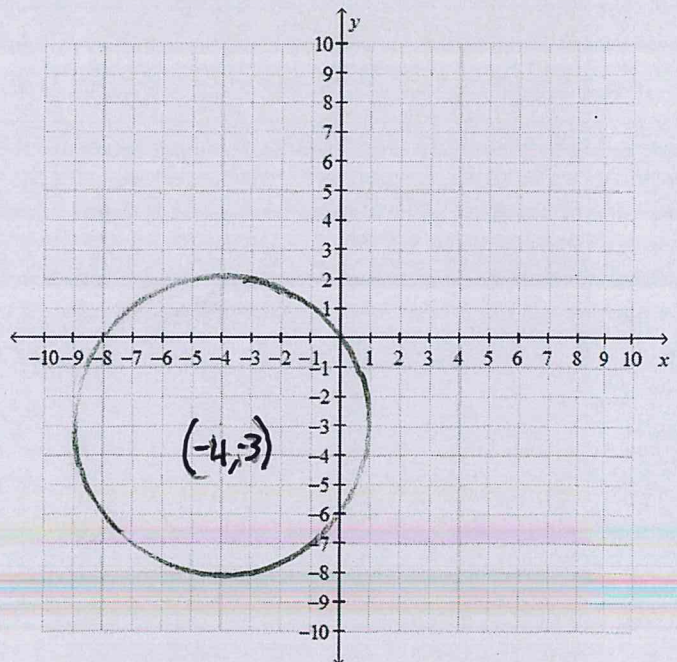
$$r = 5u$$



2. Draw a circle with a diameter of 10 units with a centre at point (-4, -3).

$$D = 10u$$

$$\begin{aligned} r &= D \div 2 \\ &= 10u \div 2 \\ &= 5u \end{aligned}$$



3. Draw a circle with a circumference of 31.4 units with a centre at point (5, -5).

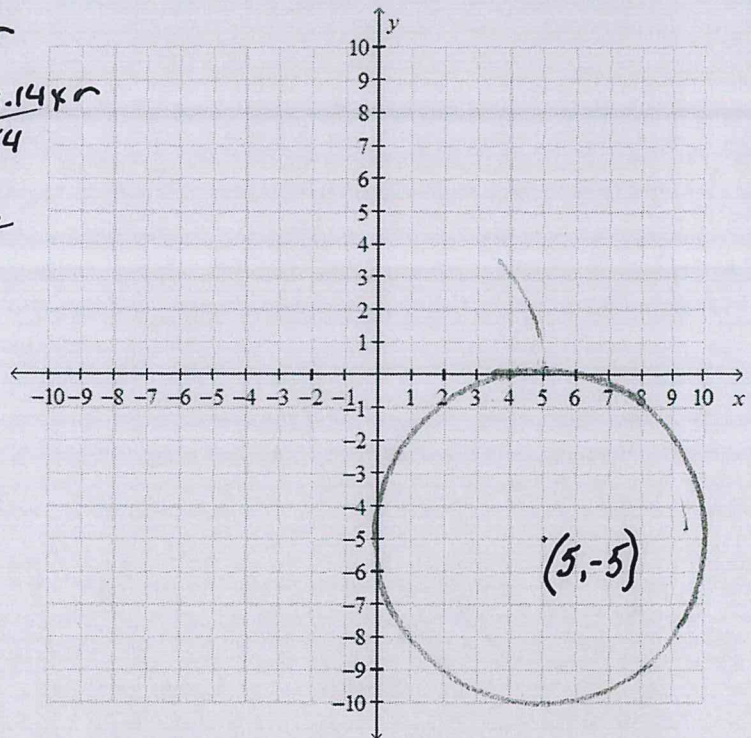
$$C = 31.4$$

$$C = 2\pi r$$

$$\frac{31.4u}{3.14} = \frac{2 \times 3.14 \times r}{3.14}$$

$$\frac{10u}{2} = \frac{2r}{2}$$

$$5u = r$$



4. Draw a circle with an area of 254.34 units² with a centre at point (0, 1).

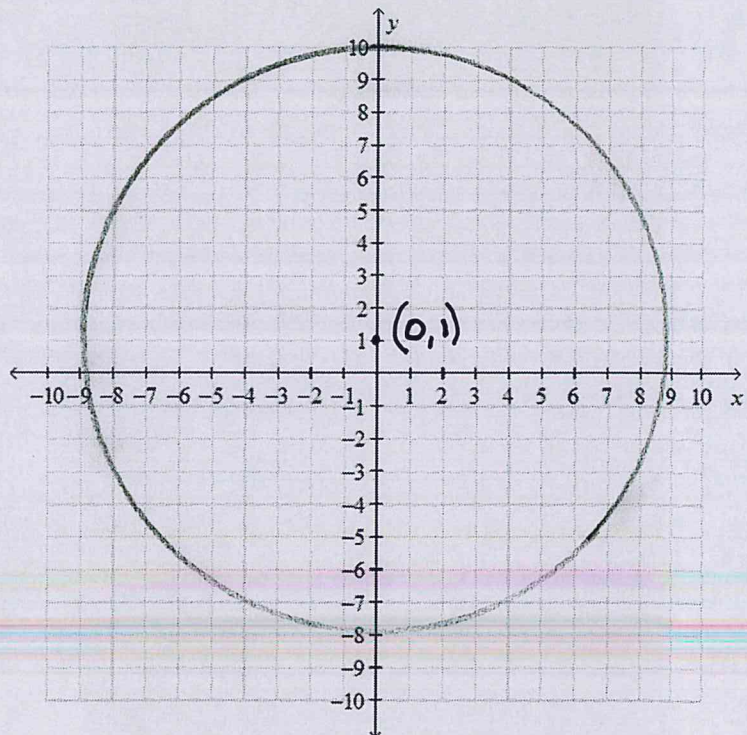
$$A = 254.34u^2$$

$$A = \pi r^2$$

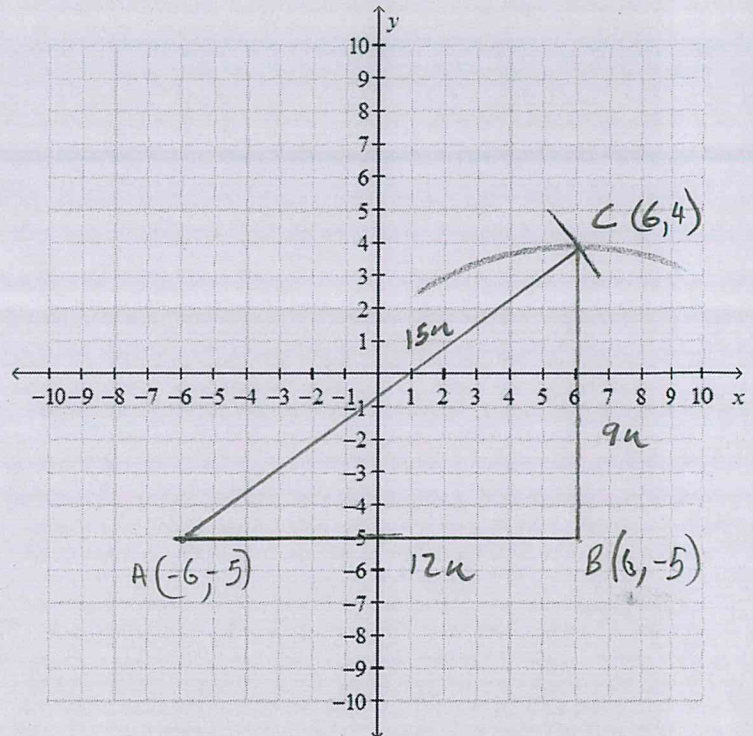
$$\frac{254.34u^2}{3.14} = \frac{3.14 \times r^2}{3.14}$$

$$\sqrt{81u^2} = \sqrt{r^2}$$

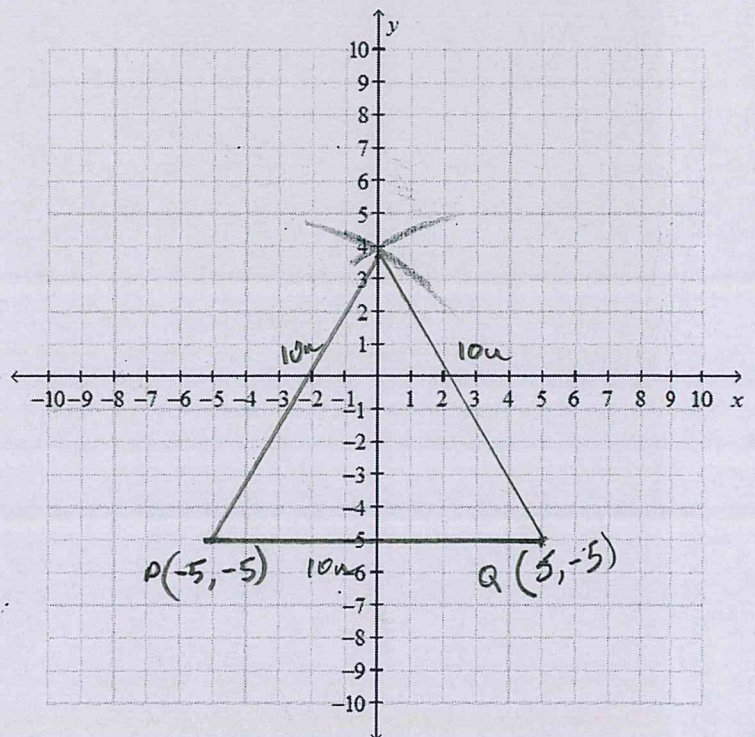
$$9u = r$$



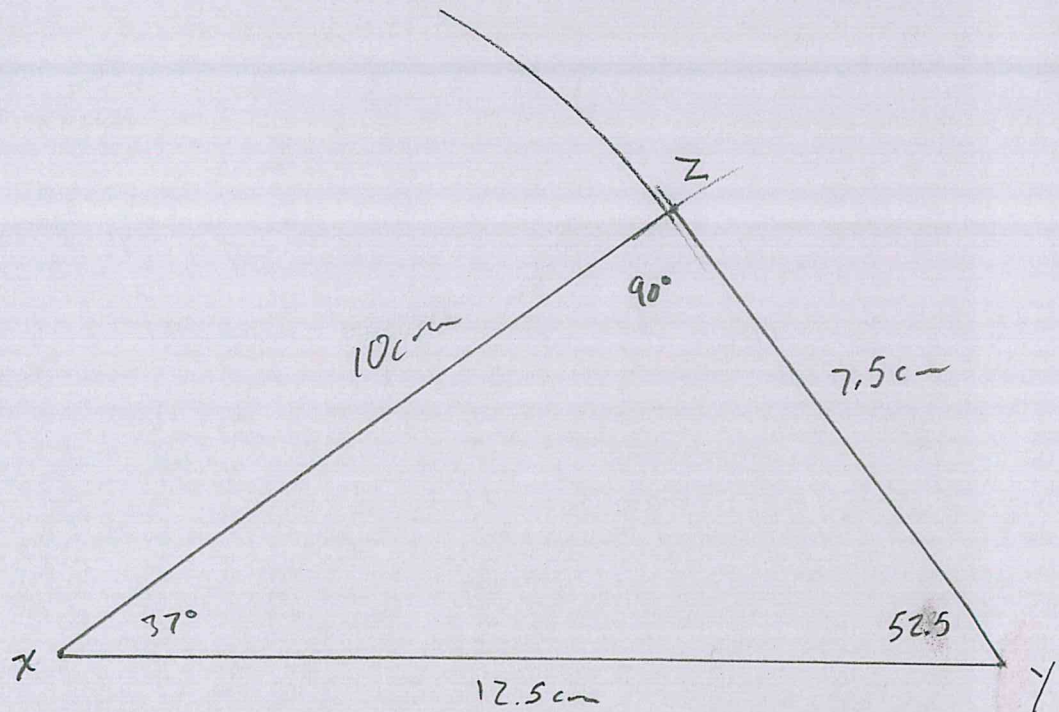
5. Draw a scalene right triangle ABC with a base that is 12 units long and has a vertex at $(-6, -5)$ and the two other sides are 9 units and 15 units.



6. Draw an equilateral triangle PQR with a side length of 10 units and one vertex that is on $(-5, -5)$.



7. Draw a triangle XYZ using Side, Side, Side with sides that are 12.5 cm, 7.5 cm, and 10 cm. Measure and label all angles and sides.



8. Create a triangle that has a base of 10 cm. A left angle of 62° and an angle on the right of 28°.

