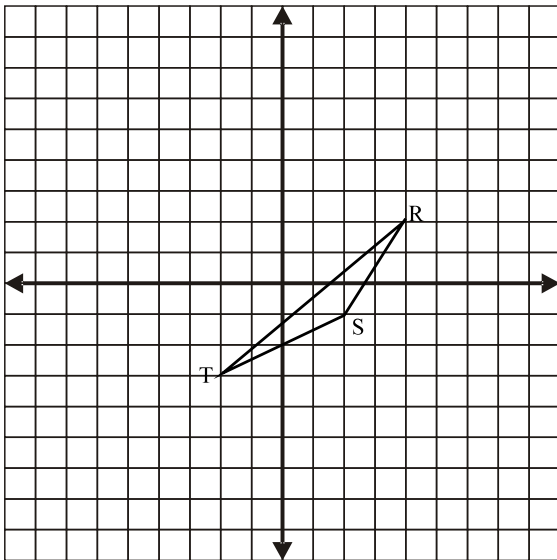


1. If $f(x) = x^2 + 3$ and $g(x) = -2x$ find $(f \circ g)(2)$

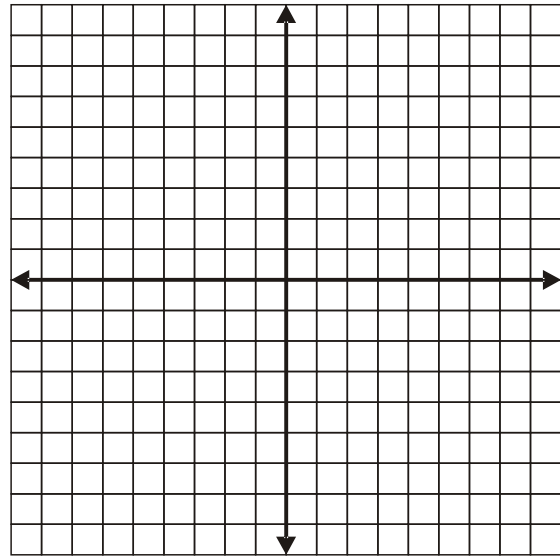
2. The ratio of the angles of a quadrilateral is $2x : 3x : 4x : 6x$. Find the measure of the smallest angle. (The sum of the measures of the angles of a quadrilateral is 360° .)

3. Construct triangle $R'S'T'$ the result of the transformation D_2 of triangle RST .



4. Find the sum of $\sqrt{12} + \sqrt{75} + \sqrt{48}$

5. Graph the circle described by the formula $(x - 1)^2 + (y + 3)^2 = 16$.

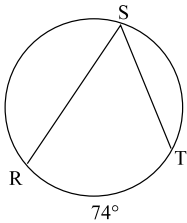


6. If $\cos x = \frac{2}{5}$ find to value of x to the nearest tenth of a degree.

7. Simplify: $4\sqrt{25x^8y^6}$.

8. A car travels 20 miles north and 30 miles east. How far to the nearest mile is the car from its starting point?

9. Find $m\angle RST$ in the circle below.



10. Fill in the table below

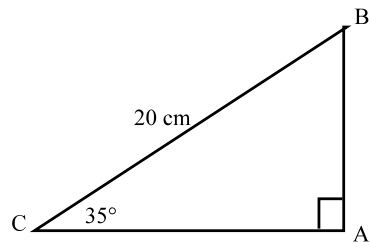
radius	diameter	circumference	area
5			
		12π	
	16		
			49π

11. Draw the lines of symmetry in the square below.



12. Find the roots of the equation $x^2 - 6x - 3 = 0$ in simplest radical form.

13. Find AB to the nearest degree in the right triangle below.



14. If the operation \blacklozenge is defined as $a \blacklozenge b = ab - a^2$, evaluate $3 \blacklozenge 5$.