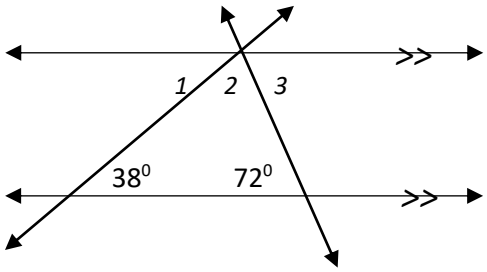
Math 8	Name:
Chapter 9 Review	Per Date:

1. Use what you know about straight angles and the angles of a triangle to find the missing angles.

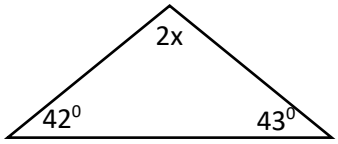
Angle 1=

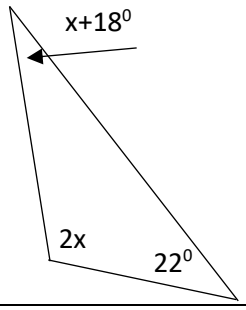
Angle 2=

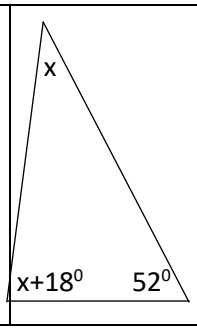
Angle 3=



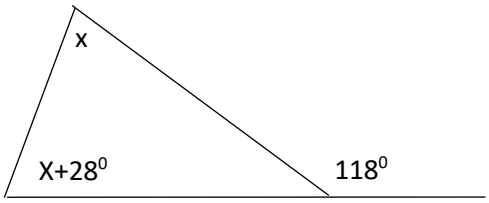
3. Write an equation and find the measure of the missing angle(s).

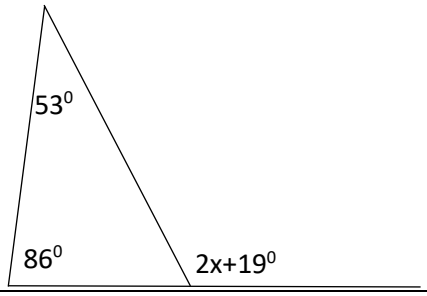




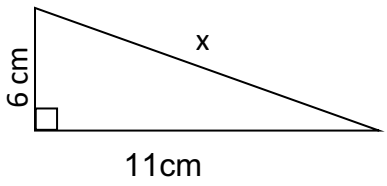


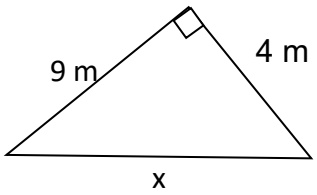
4. Use what you know about remote interior angles to write an equation and find x.

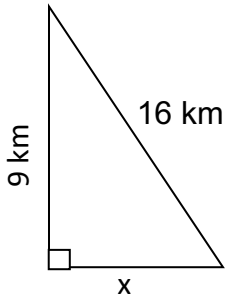


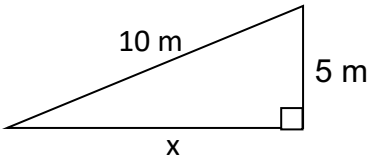


5. find the length of the missing side.









6. Determine if the three sides make a right triangle. Show your work!

a. 29, 20, 21	b. 8, 6, 9
c. 11, 15, 8	d. 15, 17, 8
e. 12, 9, 15	f. 3, 7, 5

7. Which two perfect square are the square roots between. Estimate without using a calculator.

a. $\sqrt{\quad} =$ $\sqrt{12} \approx$ $\sqrt{\quad} =$	b. $\sqrt{\quad} =$ $\sqrt{30} \approx$ $\sqrt{\quad} =$	c. $\sqrt{\quad} =$ $\sqrt{52} \approx$ $\sqrt{\quad} =$	d. $\sqrt{\quad} =$ $\sqrt{6} \approx$ $\sqrt{\quad} =$

8. Simplify

a.	$x^4 \cdot x^6$	b.	$\frac{y^{12}}{y^9}$	c.	$(y^3)^6$	d.	$(c^5)(c^6)$
e.	$\frac{y^5}{y^{12}}$	f.	$3x^7 \cdot 2x^4$	g.	$(-4d^5)(2d^3)$	h.	$(2y^2)^3$
i.	$\frac{15x^3y^5}{-3x^5y^2}$	j.	$(7s^4t^3)(2s^5t^2)$	k.	$(8x^9y^7z^{-3})^5$	l.	$\frac{2x^{16}y^5z^9}{8x^5y^{13}z^2}$

9. Draw a diagram and solve for the missing part using the Pythagorean Theorem. All questions are based on a right triangle $leg^2 + leg^2 = hypotenuse^2$

Problem	Diagram
a. A ladder is leaning against an 8 ft. fence. The top of the ladder meets the top of the fence, and the bottom of the ladder is 4 ft. away from the fence. How long is the ladder?	
b. A rectangle has a length of 30 yards and a width of 40 yards. Find the length of the diagonal.	
c. Brianna walks around a triangular park, daily. The longest side of the park measures 75 yards and the shortest side measures 45 yards. If she walks 3 full laps around the park, how far does she walk in one day?	
d. Jorge is installing a gravel path along the diagonal of a rectangular garden. The garden measures 24 feet by 32 feet long. Find the length of the diagonal. If the path is 2 feet wide and gravel costs $2.50 a square foot, how much will it cost to install the gravel path?	