

Number Nest Weekly Challenge



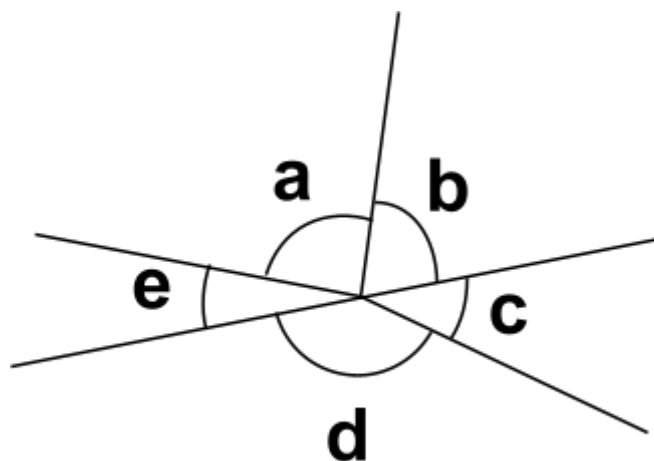
Warm up

1. What do the angles in a triangle add up to?
2. What is $288 \div 12$?
3. What is $57 \times 24 + 67$?
4. What is 205 mm in meters?

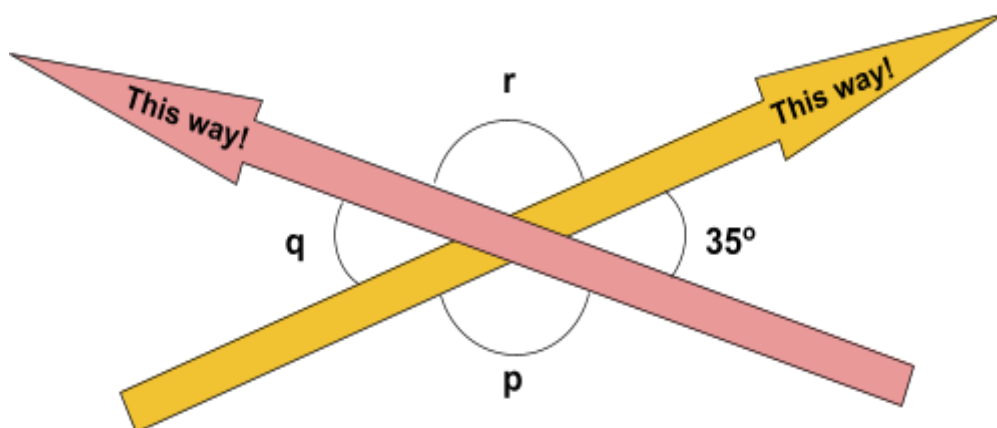
Activity

1. Lorenzo made five statements about the diagram below, two of them are incorrect. Find the incorrect statements.

1. $c + d = 180^\circ$
2. $e + b = a$
3. $a + b + c + d + e = 360^\circ$
4. $e + a + b = c + d$
5. $e = c$

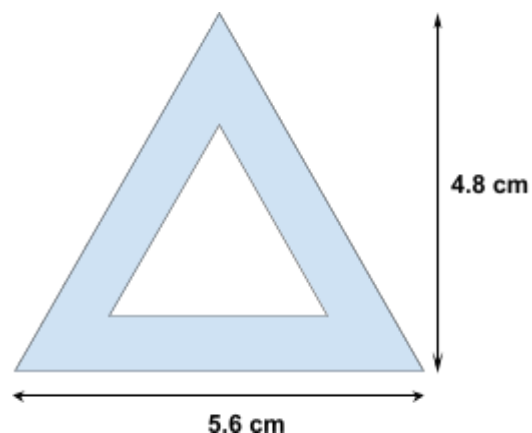


2. Alice found this sign post in Wonderland, Tweedledee and Tweedledum promised to tell her which way to go if she can work out the angles formed by the intersecting sign post. Help Alice find the missing angles:

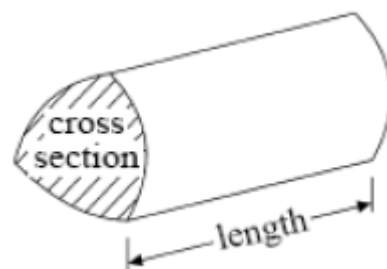


p = °
q = °
r = °

3. A blue triangle with a base of 5.6cm and a height of 4.8cm has a triangular shaped hole cut out. The base and height of the triangular hole are half the base and height of the original blue triangle respectively. What is the remaining area of the blue triangle (to two decimal places)?



4. The solid below has a cross section area of 24 cm^2 and a volume of 840 cm^3 . What is the length of the solid?



Puzzle

Find the missing areas:

