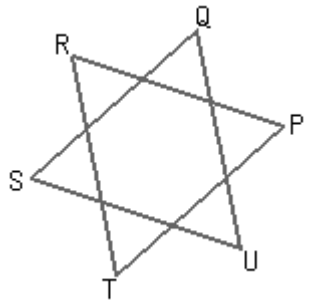
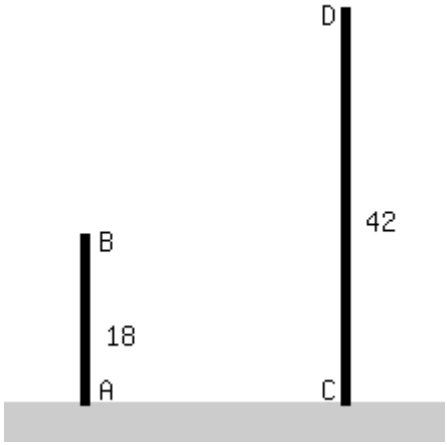
Answer the questions

(1) Find the sum of the following angles :
$\angle P + \angle Q + \angle R + \angle S + \angle T + \angle U = ?$



(2) In triangle ΔPQR, $\angle R = 60°$ and line segment RS bisects $\angle R$ such that RS is perpendicular to QP. Find angle $\angle Q$.

(3)



If the distance between A and C is 32 cm, find the distance between B and D.

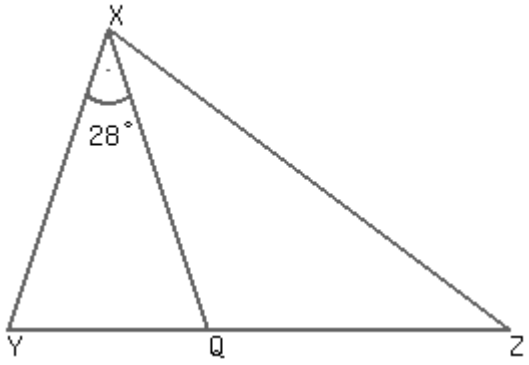
(4) If two angles in a triangle add up to 80°, then find the value of the third angle.

(5) Angles A, B, and C of a triangle are in the ratio 1:1:4. Find the value of angle A.

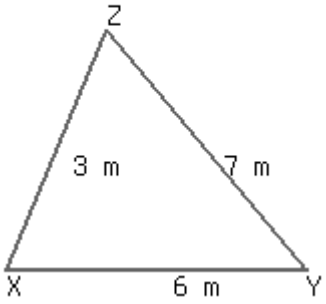
(6) The hypotenuse of a right-angled triangle is 85 meters long. If one of the remaining sides is 77 meters long, what is the length of the remaining side?

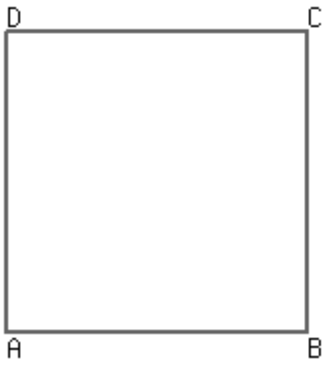
(7) The exterior angle of a triangle is 84° and the ratio of the opposite interior angles is 9:3. Find the larger of the two interior angles.

(8) In ΔXYZ, Q is a point on the side YZ such that XY = XQ = QZ.
If ∠YXQ = 28° , find ∠YXZ.



(9) Perimeter of a square is twice the perimeter of a triangle. Find the length of the side of a square.



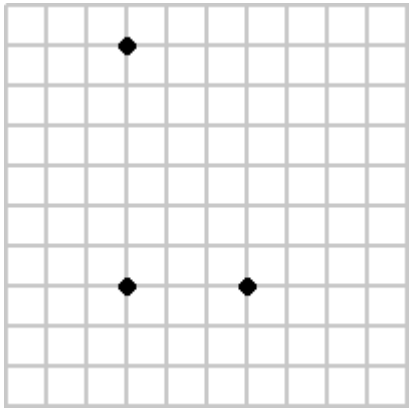


Choose correct answer(s) from the given choices

(10) In triangle PQR, ∠P > ∠R.
Which of the following is true?

a. RQ > PR
b. RQ > PQ
c. PQ < PR
d. PQ > PR

(11) Diana drew 3 dots on the grid shown below. What type of triangle will she get if she connects the dots?



a. a right-angled triangle
b. an equilateral triangle
c. an isosceles triangle
d. none of these

(12) Which of the following is false for a triangle?

a. Each angle is equal to 60°
b. Two angles are acute angles
c. Each angle is greater than 60°
d. One angle is an obtuse angle

Fill in the blanks

(13) It is not possible for an angle and its supplement to be part of a triangle - _____ (True/False)

Check True/False

(14) Lengths 144 meters, 272 meters, and 112 meters can be sides of a triangle.

- True
- False

(15) Two triangles created by dividing a rectangle into half will be congruent.

- True
- False