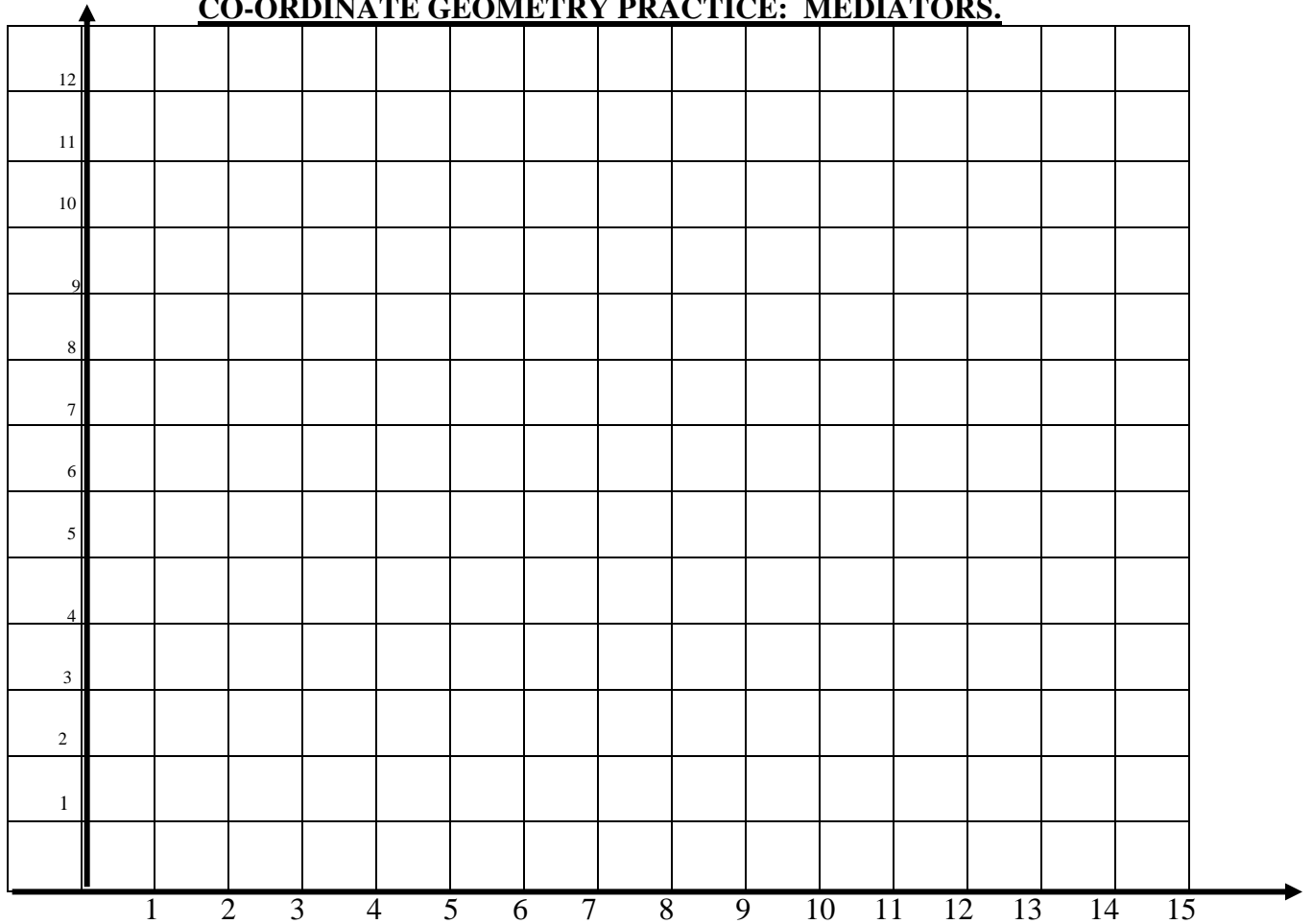


CO-ORDINATE GEOMETRY PRACTICE: MEDIATORS.



1. Draw the triangle ABC where A is (3,0) B is (15, 6) and C is (9, 12)

2. Find the gradients of : AB = BC = CA =

3. Find the MID POINT of AB and label it P P = (,)

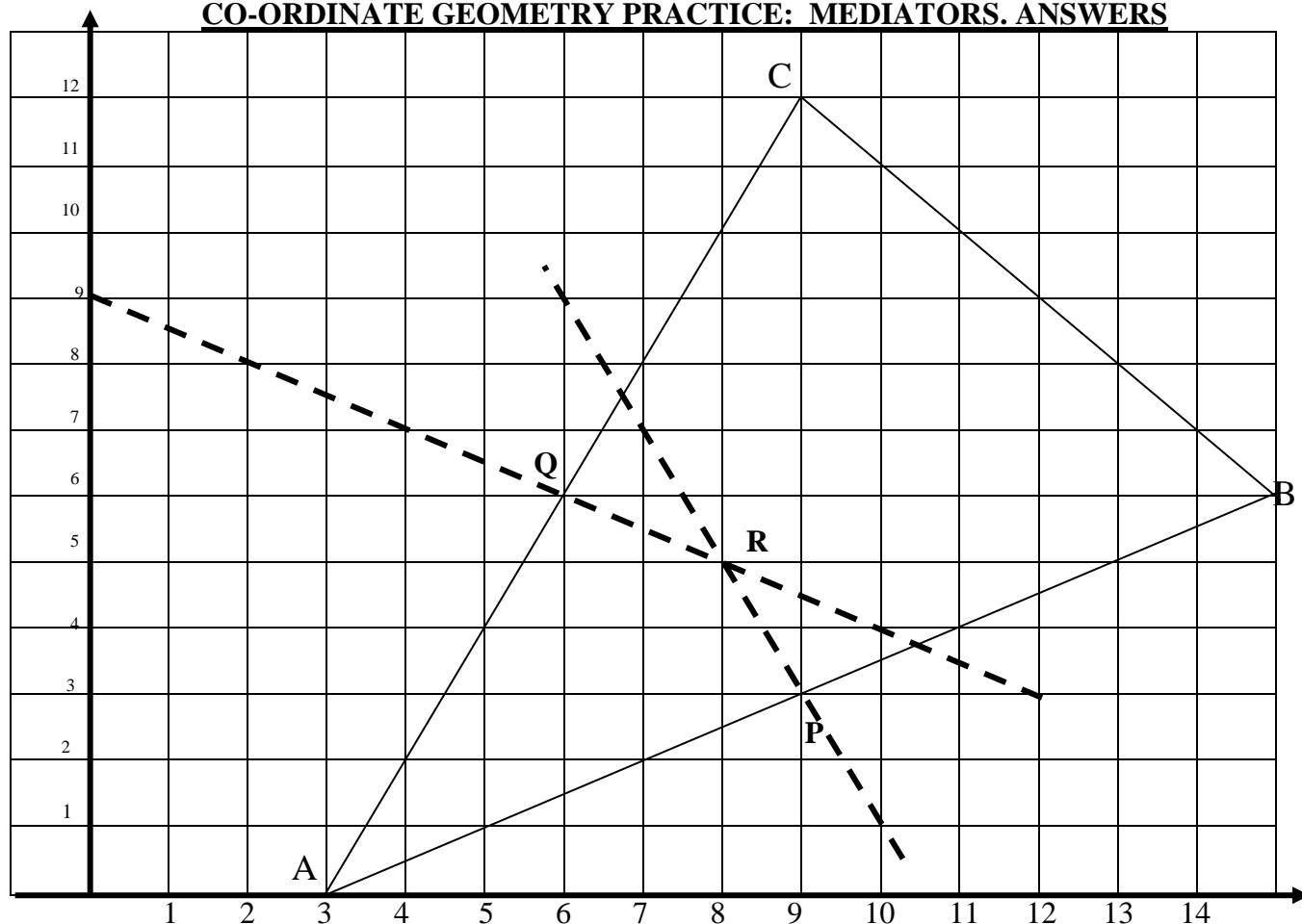
4. Find the MID POINT of AC and label it Q Q = (,)

5. Find the equation of the MEDIATOR (or Perpendicular Bisector) of AB in the form:
 $y = mx + c$

6. Find the equation of the MEDIATOR (or Perpendicular Bisector) of AC in the form:
 $y = mx + c$

7. Find the co-ordinates of the intersection of the mediators of AB and AC. Label it R.
(Note: R is the CIRCUMCENTRE of the triangle and you should be able to draw the circumcircle which has its centre at R and goes through A,B and C.)

CO-ORDINATE GEOMETRY PRACTICE: MEDIATORS. ANSWERS



1. Draw the triangle ABC where A is (3,0) B is (15, 6) and C is (9, 12)

2. Find the gradients of : $AB = \frac{1}{2}$ $BC = -1$ $CA = 2$

3. Find the MID POINT of AB and label it P $P = (9, 3)$

4. Find the MID POINT of AC and label it Q $Q = (6, 6)$

5. Find the equation of the MEDIATOR (or Perpendicular Bisector) of AB in the form:

$$y = mx + c \quad m = -2 \text{ thru } (9, 3) \quad \begin{aligned} y &= mx + c \\ 3 &= -2 \times 9 + c \\ 21 &= c \end{aligned}$$

$$\text{equ is } y = -2x + 21$$

6. Find the equation of the MEDIATOR (or Perpendicular Bisector) of AC in the form:

$$y = mx + c \quad m = -\frac{1}{2} \text{ thru } (6, 6) \quad \begin{aligned} y &= mx + c \\ 6 &= -\frac{1}{2} \times 6 + c \\ c &= 9 \end{aligned}$$

$$\text{equ is } y = -\frac{1}{2}x + 9$$

7. Find the co-ordinates of the intersection of the mediators of AB and AC. Label it R.

(Note: R is the CIRCUMCENTRE of the triangle and you should be able to draw the circumcircle which has its centre at P and goes through A,B and C.)

$$-\frac{1}{2}x + 9 = -2x + 21$$

$$-x + 18 = -4x + 42$$

$$\begin{aligned} 3x &= 24 \\ x &= 8 \\ y &= 5 \end{aligned}$$

R is (8, 5)