

REVIEW - CIRCLE GEOMETRY (SECTION 4.2)

1. a. $d_{RS} = 20$ units, $d_{ST} = 10$ units, $d_{RT} = 22.4$ units

\therefore triangle is scalene

b. $m_{RS} = \frac{3}{4}$, $m_{ST} = -\frac{4}{3}$

\therefore RS and ST are perpendicular, so $\triangle RST$ is a right triangle

c. (12, 6)

d. (9, 10)

e. The lines are parallel (slopes both equal $-\frac{4}{3}$)

2. a. Line (i) is perpendicular to AB

b. Line (ii) is parallel to AB

3. a. (3, -2)

b. 7.1 units

4. $m_{AB} = \frac{17}{7}$, $m_{CM} = -\frac{7}{17}$

\therefore CM is perpendicular to AB

5. $c = 10$, $d = 7$

6. $x = -2$ or $x = 8$

7. $x = -5$