

## REVIEW - CIRCLE GEOMETRY (SECTION 4.2)

1. a.  $d_{RS} = 20$  units,  $d_{ST} = 10$  units,  $d_{RT} = 10\sqrt{5}$  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.  $5\sqrt{2}$  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.  $x = -5$