

ANSWER SHEET.

1.  $m\angle PQS = 36^\circ$

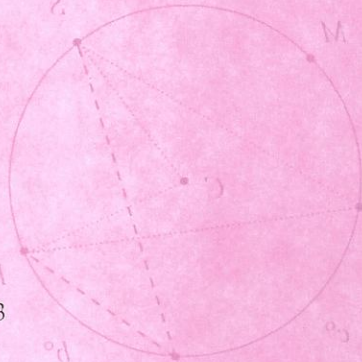
$m\angle MQS = 57.5^\circ$

2. a.  $36100 \text{ ft}^2$

b.  $93860 \text{ ft}^2$

c.  $129960 \text{ ft}^2$

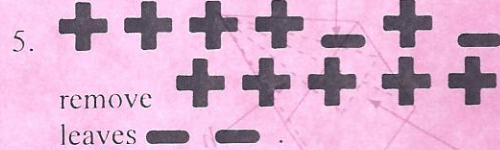
d.  $2743600 \text{ ft}^3$



3. both  $(0, 0, 0)$  and  $(0, 8, 0)$  are valid.

4.  $\left(-\frac{69}{2}, \frac{91}{4}, -\frac{3}{4}\right)$  and

$\left(-\frac{81}{4}, \frac{87}{8}, \frac{13}{8}\right)$ .



6.  $\cong 4.88$  miles.

7. Shaded area  $\cong \frac{3}{4}$ .

8. a.  $\cong 20329$  meters

b.  $\cong 64.24$  seconds

9. a. #2

b. #1

c. #3

10.  $\cong 554.5$  seconds

11.  $-\frac{11}{29} + \frac{16}{29}i$

12.  $4 : 2598960$

13.  $-\frac{3}{2}$

14. a.  $x = 0, \frac{14}{9}, -6.$

b.  $y = 0$

15.  $\cong 52,124.$

16. 1.

17.  $(-\infty, 1 - \sqrt{5}) \cup (1 + \sqrt{5}, \infty)$

18. 36.

19. The matrix is singular. There is no solution.

20.  $(-\infty, 0) \cup \left(0, \frac{1}{2}\right)$