

Answers to most of worksheet answers from this unit are on the website scaseyjones.com.

See the homework answers link.

p. 379 #1-3(a-e), 4, 5, 14, 16, 17, 21

1. a) $\sqrt{21}$
b) $\sqrt{77}$
c) 4
2. a) $4\sqrt{5}$
b) 3
c) $3\sqrt{5} + 8$
3. a) 6
b) 8
c) $4\sqrt{3}$
d) 4
e) 9
4. a) $2\sqrt{15}$
b) 5
c) 6
d) $\sqrt{55}$
5. a) 9
b) 54
c) $15 + 6\sqrt{3}$
14. 12 m
16. a) 5
b) 12
17. a) $2\sqrt{7}$
b) $16\frac{2}{3}$
c) $4\sqrt{6}$
d) $7\frac{11}{12}$
21. $2\sqrt{5}$



p. 401 #5–10, 12, 13, 16, 18

5. a) 12 f) $5\sqrt{7}$
b) $2\sqrt{7}$ g) 72
c) 10 h) 45
d) 0.5 i) $12\sqrt{7}$
e) 34
6. 52
7. 50 dm
8. 17
9. a) 24
b) $300\sqrt{5}$
10. 17
12. 100
13. ≈ 28 km
16. a) 7
b) 20; 20
18. 29 km



p. 387 #2–9, 12–16, 18–24, 26, 27, 29

2. $3\sqrt{2}$ cm
3. 40 km
4. 46
5. 9
6. $2\sqrt{3}$
7. 10
8. 14 dm
9. a) (2, 3)
b) 8; 6
c) 10
d) Yes
12. a) $2\sqrt{7}$
b) 10
c) 32
d) 20
13. 10 km
14. $6\sqrt{2}$
15. 60
16. 4.8
18. $4\sqrt{3}$
19. ≈ 5.56 m
20. $(6 + 6\sqrt{2})$ cm
21. $6\sqrt{5}$
22. Obtuse; impossible
23. a) 1500 sq m
b) ≈ 36 m
24. $18 + 6\sqrt{5}$
26. 10
27. 7 ft
29. 50



p. 408 #1–9, 15–19, 22, 24

1. a) $7; 7\sqrt{3}$
b) $10\sqrt{3}; 20$
c) $5; 10$
d) $173\sqrt{3}; 346$
e) $114; 114\sqrt{3}$
2. a) $2\sqrt{3}; 4\sqrt{3}$
b) $\frac{15}{2}; \frac{15}{2}\sqrt{3}$
c) $5\sqrt{3}; 10\sqrt{3}$
d) $\frac{7\sqrt{3}}{3}; \frac{14\sqrt{3}}{3}$
3. a) $2\sqrt{3}$
b) $14\sqrt{3}$
c) $13\sqrt{3}$
4. a) $8\sqrt{2}$
b) $4\sqrt{2}$
c) $17\sqrt{2}$
d) $19\sqrt{2}$
5. $11\sqrt{2}$
6. 16 m
7. $3\sqrt{3} \text{ mm}$
8. $4\sqrt{3}$
9. a) $5\sqrt{2}$
b) 13
15. 38
16. $28 + 12\sqrt{2}$
17. a) $3\sqrt{3}$
b) 9
c) $6\sqrt{3}$
d) $1:2$
18. $6; 6\sqrt{3}$
19. ≈ 57.9
22. $3\sqrt{3}$
24. $3\sqrt{3}; \frac{3}{2}\sqrt{3}$



p. 420 #2–15

2. a) $1/2$ b) $\sqrt{3}/2$ c) $\sqrt{3}/3$ d) $\sqrt{3}/2$ e) $1/2$ f) $\sqrt{3}$
3. a) $\sqrt{2}/2$ b) $\sqrt{2}/2$ c) 1
4. a) $39/89$ b) $39/80$
5. $4/5$
6. a) A b) A c) A
7. a) $2\sqrt{6}$ b) $2\sqrt{6}/7$ c) $5\sqrt{6}/12$
8. a) $12/13$ b) $5/13$
9. a) $7/25$ b) $8/17$ c) $4/5$
10. ≈ 129 mm
11. a) 45 b) 30
12. $4/5$
13. a) $2/3$ b) $3\sqrt{13}/13$
14. a) $3/5$ b) $3/4$
15. $4/5$



p. 425 #4–7, 9–13, 15

All answers are approximate.

4. a) 18 b) 44 c) 62 d) 16
5. 15
7. 24°
9. 37° ; 53° ; 90°
10. 301 m
11. a) 67° b) $5\sqrt{11}$
12. 5.6 inches; 11.0 inches
13. 10
15. 104 dm



p. 429 #1, 3–12, 23, 24, 28, 29

- 1.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.
- 11.
- 12.
- 23.
- 24.
- 28.
- 29.

