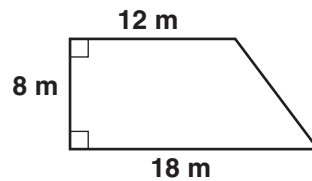


Answers for Lesson 10-2, pp. 542–544 Exercises

1. 472 in.^2
2. 144.5 cm^2
3. 108 ft^2
4. $110,622 \text{ mi}^2$
5. 150 cm^2
6. $\frac{5}{6} \text{ ft}^2$
7. about $43,290 \text{ mi}^2$
8. 30 ft^2
9. 72 m^2
10. $52\sqrt{3} \text{ ft}^2$
11. 80 in.^2
12. 18 m^2
13. 24 ft^2
14. 1200 ft^2
15. 96 in.^2
16. 24 m^2
17. 20 in.^2

18. a.



b. 48 m

c. 120 m^2

19. Check students' work.

20. 9 cm^2

21. 19.5 cm^2

22. 11.3 cm^2

23. 49.9 ft^2

24. 1.8 m^2

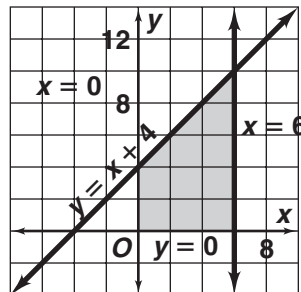
25. 18 units^2

26. 15 units^2

27. 15 units^2

28. C

29. a.



b. trapezoid

c. 42 units^2

Answers for Lesson 10-2, pp. 542–544 Exercises (cont.)

30. 18 cm^2 31. $32\sqrt{3} \text{ m}^2$ 32. $\frac{128\sqrt{3}}{3} \text{ in.}^2$
33. a. $A = \frac{1}{2}b_1h$; $A = \frac{1}{2}b_2h$
- b. The area of the trapezoid is the sum of the areas of the triangles, so $A = \frac{1}{2}b_1h + \frac{1}{2}b_2h = \frac{1}{2}h(b_1 + b_2)$.
34. Sample: Each kite section is one-half of the corresponding rectangle section.
35. $b_1 = 12 \text{ cm}$, $b_2 = 24 \text{ cm}$, $h = 18 \text{ cm}$
36. 1.5 m^2
37. $100 + 50\sqrt{3}$ or about 186.6 in.^2