

Name: _____

Due Date: _____

Teacher: _____

Parent Sign: _____

Answers

1. 6

2. 12

3. 8

4. 5

5. 3

6. 6

7. 6

8. 3

9. 168 cm^2

(Triangles: $2 \times 24 = 48$; lateral: $6 \times 5 + 8 \times 5 + 10 \times 5 = 120$; total $48 + 120 = 168$)

10. 288 cm^2

(Triangles: 48; lateral: $6 \times 10 + 8 \times 10 + 10 \times 10 = 240$; total 288)

11. 84 cm^2

(Triangles: $2 \times 6 = 12$; lateral: $3 \times 6 + 4 \times 6 + 5 \times 6 = 72$; total 84)

12. 216 cm^2

(Triangles: 48; lateral: $6 \times 7 + 8 \times 7 + 10 \times 7 = 168$; total 216)

13. 110 cm^2

(Bases 40; lateral $15 + 25 + 30 = 70$; total 110)

14. 69 cm^2

(Bases $2 \times 12 = 24$; lateral $4 \times 3 + 5 \times 3 + 6 \times 3 = 45$; total 69)

15. 144 cm^2

(Bases 48; lateral $6 \times 4 + 8 \times 4 + 10 \times 4 = 96$; total 144)

16. 160 cm^2

($200 - 40 = 160$)

17. 96 cm^2

(Bases $2 \times 12 = 24$; lateral $5 \times 4 + 5 \times 4 + 8 \times 4 = 72$; total 96)

18. 120 cm^2

(Lateral $90 + 2 \times 15 = 120$)

19. 180 cm^2

(Triangles $2 \times 54 = 108$; lateral $9 \times 2 + 12 \times 2 + 15 \times 2 = 72$; total 180)

20. 120 cm^2

Name: _____

Due Date: _____

Teacher: _____

Parent Sign: _____

(Triangles $2 \times 6 = 12$; lateral $3 \times 9 + 4 \times 9 + 5 \times 9 = 108$; total 120)

21. 94 cm^2

$(2(5 \cdot 3 + 5 \cdot 4 + 3 \cdot 4) = 2(15+20+12)=94)$

22. 112 cm^2

$(2(10 \cdot 2 + 10 \cdot 3 + 2 \cdot 3) = 2(20+30+6)=112)$

23. 88 cm^2

$(2(8 \cdot 4 + 8 \cdot 1 + 4 \cdot 1) = 2(32+8+4)=88)$

24. 294 cm^2

$(6 \cdot 7^2 = 6 \cdot 49 = 294)$

25. 104 cm^2

$(2(6 \cdot 2 + 6 \cdot 5 + 2 \cdot 5) = 2(12+30+10)=104)$

26. 132 cm^2

$(2(12 \cdot 3 + 12 \cdot 2 + 3 \cdot 2) = 2(36+24+6)=132)$

27. 146 cm^2

$(2(9 \cdot 5 + 9 \cdot 2 + 5 \cdot 2) = 2(45+18+10)=146)$

28. 52 cm^2

$(2(4 \cdot 3 + 4 \cdot 2 + 3 \cdot 2) = 2(12+8+6)=52)$

29. 340 cm^2

$(2(10 \cdot 8 + 10 \cdot 5 + 8 \cdot 5) = 2(80+50+40)=340)$

30. 6 cm

$(\frac{SA}{2} = 118 = lw + (l+w)h \rightarrow 40 + 13h = 118 \rightarrow 13h = 78 \rightarrow h = 6)$

[Note: using $SA = 236 \rightarrow \text{half} = 118$; $40 + 13h = 118$]

31. 5 cm

$(\frac{SA}{2} = 47 = lw + lh + wh \rightarrow wh = 12 \rightarrow l(4+3) = 35 \rightarrow 7l = 35 \rightarrow l = 5)$

32. 3 cm

$(6s^2 = 54 \rightarrow s^2 = 9 \rightarrow s = 3)$

33. 108 cm^2

$(2(6 \cdot 4 + 6 \cdot 3 + 4 \cdot 3) = 2(24+18+12)=108)$

34. 162 cm^2

$(2(15 \cdot 2 + 15 \cdot 3 + 2 \cdot 3) = 2(30+45+6)=162)$

35. 238 cm^2

$(2(14 \cdot 7 + 14 \cdot 1 + 7 \cdot 1) = 2(98+14+7)=238)$

Name: _____

Due Date: _____

Teacher: _____

Parent Sign: _____

36. 5 cm

$$\left(\frac{SA}{2} = 110 = 40 + (10+4)h \rightarrow 40 + 14h = 110 \rightarrow 14h = 70 \rightarrow h = 5\right)$$

37. 148 cm²

$$(\text{Total} = 2(24+30+20) = 2 \cdot 74 = 148)$$

38. 2200 cm²

$$(2(30 \cdot 20 + 30 \cdot 10 + 20 \cdot 10) = 2(600+300+200)=2200)$$

39. 52 cm²

$$(2(2 \cdot 3 + 2 \cdot 4 + 3 \cdot 4) = 2(6+8+12)=52)$$

40. 9 cm

$$\left(\frac{SA}{2} = 192 = 48 + (12+4)h \rightarrow 48 + 16h = 192 \rightarrow 16h = 144 \rightarrow h = 9\right)$$

41. 94 cm²

$$(2(5 \cdot 3 + 5 \cdot 4 + 4 \cdot 3) = 2(15+20+12)=94)$$

42. 88 cm²

$$(2(6 \cdot 2 + 6 \cdot 4 + 2 \cdot 4) = 2(12+24+8)=88)$$

43. 82 cm²

$$(2(7 \cdot 3 + 7 \cdot 2 + 3 \cdot 2) = 2(21+14+6)=82)$$

44. 132 cm²

$$(2(8 \cdot 5 + 8 \cdot 2 + 5 \cdot 2) = 2(40+16+10)=132)$$

45. 98 cm²

$$(2(9 \cdot 4 + 9 \cdot 1 + 4 \cdot 1) = 2(36+9+4)=98)$$

46. 222 cm²

$$(2(12 \cdot 3 + 12 \cdot 5 + 3 \cdot 5) = 2(36+60+15)=222)$$

47. 912 cm²

$$(2(18 \cdot 12 + 18 \cdot 8 + 12 \cdot 8) = 2(216+144+96)=912)$$

48. 52 cm²

$$(2(4 \cdot 3 + 4 \cdot 2 + 3 \cdot 2) = 2(12+8+6)=52)$$

49. 174 cm²

$$(2(11 \cdot 5 + 11 \cdot 2 + 5 \cdot 2) = 2(55+22+10)=174)$$

50. 288 cm²