

Worksheet Surface Area of Prisms

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|---|---|---|
| 1. Hexagonal Prism | 11. 10.23 ft | 22. 3840 ft ² |
| 2. Hexagon | 12. 108 ft ² | 23. 160 in ² |
| 3. Rectangle | 13. 108 cm ² | 24. 8 rolls, \$77.20 |
| 4. 6 | 14. 480 m ² | 25. 180x ² units ² |
| 5. \overline{AG} , \overline{EL} , \overline{FK} , \overline{DJ} , \overline{CI} , \overline{BH} | 15. 360 cm ² | 26. F=6, V=8, E=12 |
| 6. 264 m ² | 16. 3 ft | 27. F=8, V=12, E=18 |
| 7. 288 m ² | 17. 14 cm | 28. 8 ft |
| 8. 150x ⁴ y ² units ² | 18. 40x ³ y ² + 120x ² y ³ + 24x ³ y | 29. 96x ² + 144xy + 54y ² |
| 9. 475.2 m ² | 19. 609 units ² | 30. 6x ² y ³ units ² |
| 10. 8 m | 20. 3 pints | |
| | 21. 26 gallons | |

Worksheet Surface Area of Pyramids

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| 1. LA=192 units ² , SA=336 units ² | 12. 6 ft |
| 2. LA=240 units ² , SA=340 units ² | 13. 756 in ² |
| 3. LA=480 m ² , SA=736 m ² | 14. 72 m ² |
| 4. LA=700 cm ² , SA=896 cm ² | 15. 4 gallons red, 3 gallons blue |
| 5. LA=192 units ² , SA=448 units ² | 16. 24000 m, ² |
| 6. LA=216 units ² , SA=258 units ² | 17. 24 ft ² |
| 7. SA=480 m ² | 18. 144√3 m ² |
| 8. 72√3 cm ² | 19. 72 m ² |
| 9. 611.76 ft | 20. 736 cm ² |
| 10. 231245.28 ft ² | 21. 912 m ² |
| 11. 924981.12 ft ² | 22. 1680 m ² |

Worksheet Surface Area of Cylinders and Cones

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| 1. Cylinder | 14. $r = 6\text{ mm}, h = 6\text{ mm}$ |
| 2. Circle | 15. They are the same. |
| 3. \overline{GF} | 16. 9.01 cm |
| 4. \overline{FH} | 17. 11.90 cm |
| 5. LA=180π, SA=324π | 18. 110π ft ² |
| 6. LA=84π, SA=102π | 19. 9π + 9π√10 ft ² |
| 7. LA=196π√5, SA=196π + 196π√5 | 20. 90π m ² |
| 8. LA=77π, SA=101.5π | 21. 32π in ² added |
| 9. LA=115.5π ≈ 362.67, SA=145.75π ≈ 457.66 | 22. 2355 in ² |
| 10. LA=160π ≈ 502.4, SA=165π ≈ 518.1 | 23. \$1063.50 |
| 11. LA=1754.4π ≈ 5508.82, SA=3354.4π ≈ 10532.82 | 24. \$235.50 |
| 12. LA=228.9π ≈ 178.75, SA=341.4π ≈ 1072.00 | 25. 87.92 in ² |
| 13. 5 ft | 26. 122 cans |
| | 27. 392π in ² |
| | 28. 216π in ² |

Worksheet 11.7 Comparing Perimeter, Surface Area and Volume of Solids

1. Similar
2. Congruent
3. Similar
4. Neither
5. 2:3
6. 4:9
7. 16 cm^3
8. 225 cm^2
9. 8:5
10. 64:25
11. 512:125
12. 128 cm^2
13. 125 cm^3
14. 2:5
15. 8:125
16. 3.456
17. $\frac{375\pi}{4} = 93.75\pi \text{ units}^3$
18. $2058\pi \text{ in}^3$
19. 151.08 ft^2 , 46956.7 ft^3
20. 1:2
21. 7:2
22. 5:6
23. 1:4

