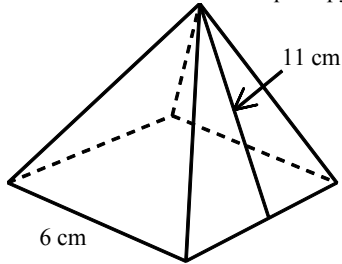
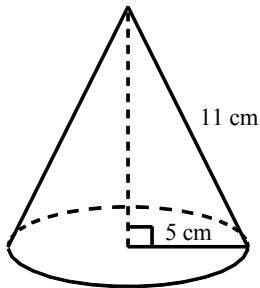


1. Factor. $(d + e)w^2 - 3w(d + e) - 10(d + e)$

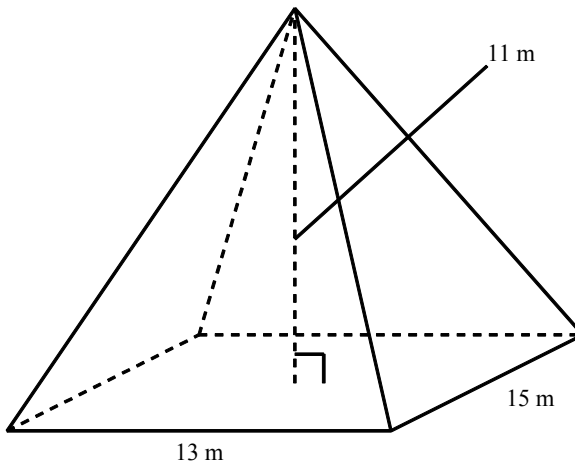
2. Find the surface area of a square pyramid if the length of the base is 6 cm and the slant height is 11 cm.



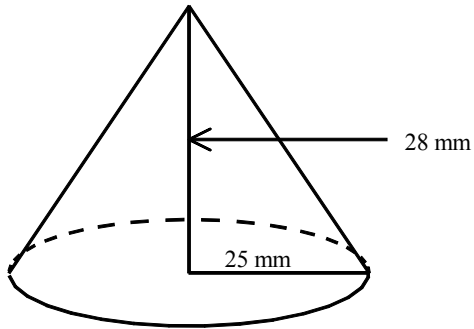
3. Find the surface area of a cone if the radius is 5 cm and the slant height is 11 cm.



4. Find the volume of the pyramid.

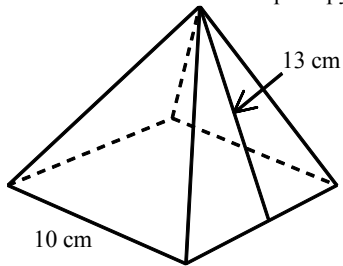


5. Find the volume of the cone. (Use 3.14 for π . Round to the nearest hundredth.)

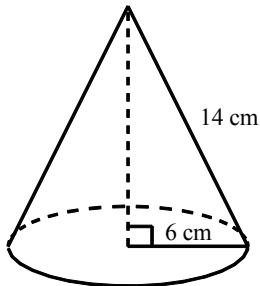


6. Factor. $(a + b)x^2 - 6x(a + b) + 8(a + b)$

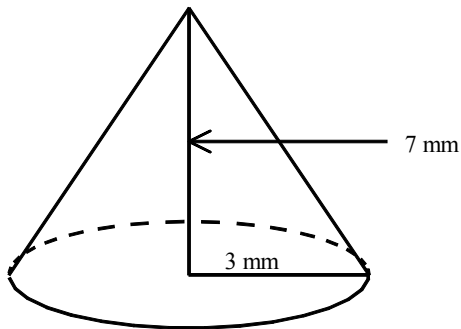
7. Find the surface area of a square pyramid if the length of the base is 10 cm and the slant height is 13 cm.



8. Find the surface area of a cone if the radius is 6 cm and the slant height is 14 cm.



9. Find the volume of the cone. (Use 3.14 for π . Round to the nearest hundredth.)



Factor.

10. $(e + f)y^2 + 15y(e + f) + 54(e + f)$

11. $(g + h)z^2 - 11z(g + h) + 24(g + h)$

12. $(c + d)w^2 + 6w(c + d) - 7(c + d)$

13. $4x^2 + 16x + 12$

14. $18 - 15x + 3x^2$

15. $3stu^2 - 18stu + 15st$

16. Factor: $64x^2 + 32x - 60$

17. Solve the system by the elimination method: $2N_Q - 5N_D = -8$

$$N_Q + 5N_D = -4$$

18. Solve the system of equations by substitution.

$$3N_Q + 2N_D = 23$$

$$-N_Q + N_D = -1$$

19. A single die is rolled three times. What is the probability that the next roll will produce a number less than 1?

20. Mae rolls a fair die five times and each time she rolls a one. What is the probability that on her next roll she will roll a three?

21. A fair coin is tossed three times. What is the probability that the first toss will come up heads and the next two tosses will come up tails?
22. Mary has a bag that contains 9 green marbles, 8 red marbles, and 4 blue marbles. Without looking, Mary draws a marble from the bag. She puts the marble back in the bag and then draws another marble out of the bag. What is the probability that Mary will draw a red marble followed by a green marble?
- [A] $\frac{1}{20}$ [B] $\frac{6}{35}$ [C] $\frac{1}{147}$ [D] $\frac{17}{21}$
23. Simplify: $3\sqrt{3} + 2\sqrt{3} - 2\sqrt{3}$
24. Nathan's test scores were 78, 77, 92, and 74. What was his weighted average if the tests were weighted 2, 3, 5, and 4, respectively? Round your answer to the nearest whole number.

Simplify:

25. $4\sqrt{18} - \sqrt{75} + 2\sqrt{2} - 3\sqrt{300}$
26. $-\sqrt{6} - 2\sqrt{600} - 4\sqrt{24}$