

Chapter 1 & 2 Practice Test

1. What is an integer?

Perform the indicated operations. Remember to reduce fractions.

2. $|20 - 36|$

3. $(-2)^3$

4. $-7.25 + 9.1$

5. $(1.2)(-0.03)$

6. $\frac{1}{8} + \frac{2}{5}$

7. $\left(\frac{2}{7}\right)^2$

8. 7^0

9. $|-42| - |50|$

10. $-18 - (-22)$

11. $\frac{3}{4} \left(\frac{8}{27}\right)$

12. $5 + 2 \cdot 8 \div 4 - 11$

13. $\frac{1}{15} \div \frac{3}{5}$

14. $3 - (4 + 2^2 \cdot 3) - 2(7 - 4)^2$

Simplify, leaving each answer in exponential form with positive exponents.

15. $w^4 \cdot w^3$

16. 3^{-2}

17. $\frac{2^{10}}{2^7}$

18. $(m^4)^{12}$

19. $\frac{10^8}{10^5}$

Evaluate each expression for $x = -4$, $y = 2$, $z = \frac{1}{2}$.

20. $5x^2z$

21. $y^2 - 3y + 6$

22. $|y - x|$

Simplify.

23. $8x - (x + 7)$

24. $a(b - 3) - ab + 5a$

Solve. Show your work.

25. $\frac{x}{4} - 3 = 8$

26. $3x - 9 = 2(x + 2)$

27. $17 - (x + 8) = 10$

28. $y = \frac{3y}{5} + 12$

29. $3x - 7 = 3(x + 2)$

30. $3(2x - 1) = 4x + 5 + 2x - 8$