

Answer Key

Quantitative Review

1.

$$a - (-1) - (-2) = a + 1 + 2 = a + 3$$

2.

$$\frac{1}{a} + \frac{2}{b} = \frac{b + 2a}{ab}$$

3.

$$\frac{a+1}{a} + \frac{2}{a} = \frac{a+1+2}{a} = \frac{a+3}{a}$$

4.

$$\frac{2a}{a^2b} + \frac{3a}{ab^2} = \frac{2b + 3a}{ab^2}$$

5.

$$\frac{3}{a} + \frac{2}{b} + \frac{5}{c} = \frac{3bc + 2ac + 5ab}{abc}$$

6.

$$\frac{a+b}{a} + \frac{1}{a} + \frac{c}{a} = \frac{a+b+1+c}{a}$$

7. Commutative property of addition
8. Associative property of addition
9. Identity property of addition
10. Inverse property of addition
11. Distributive property
12. Inverse property of multiplication

13. $12^3 = 12 \cdot 12 \cdot 12 = 1728$ $12^4 = 12 \cdot 12 \cdot 12 \cdot 12 = 20736$

14. $100 = 10^2$ $1000 = 10^3$ $10000 = 10^4$ $100000 = 10^5$ $1000000 = 10^6$

15. $1000000 = 10^6$ $10000000 = 10^7$ $100000000 = 10^8$ $1000000000 = 10^9$

16. $10^3 = 1000$ $10^4 = 10000$ $10^5 = 100000$ $10^6 = 1000000$

17. $10^2 = 100$ $10^3 = 1000$ $10^4 = 10000$ $10^5 = 100000$

18. $10^3 = 1000$ $10^4 = 10000$ $10^5 = 100000$ $10^6 = 1000000$

19. $10^2 = 100$ $10^3 = 1000$ $10^4 = 10000$ $10^5 = 100000$

20. $10^1 = 10$ $10^2 = 100$ $10^3 = 1000$ $10^4 = 10000$

21. $10^0 = 1$ $10^1 = 10$ $10^2 = 100$ $10^3 = 1000$

22. $10^{-1} = \frac{1}{10}$ $10^{-2} = \frac{1}{100}$ $10^{-3} = \frac{1}{1000}$ $10^{-4} = \frac{1}{10000}$

23. $10^{-2} = \frac{1}{100}$ $10^{-3} = \frac{1}{1000}$ $10^{-4} = \frac{1}{10000}$ $10^{-5} = \frac{1}{100000}$

24. $10^{-3} = \frac{1}{1000}$ $10^{-4} = \frac{1}{10000}$ $10^{-5} = \frac{1}{100000}$ $10^{-6} = \frac{1}{1000000}$

25. $a + b = 1$
 $\frac{1}{a+b} = \frac{1}{1} = 1$

26. $-2 + 2 = 0$
 $\frac{0}{1} = 0$

27. $-100 + a + 100 = a$
 $\frac{a}{1} = a$

28. $-2 + 2 = 0$
 $\frac{0}{1} = 0$

29. $100a + 2 = 100 \cdot \frac{1}{100}a + 2 = a + 2$

30. $100a + 2 = 100 \cdot 100a + 2 = 10000a + 2$

31. $-10 + a + 10 = a$
 $\frac{a}{1} = a$

32. $-2 + 2 = 0$
 $\frac{0}{1} = 0$

33. $a + a = 2a$
 $\frac{2a}{2} = a$

34. $a + 2 = 2a + 2$
 $\frac{2a+2}{2} = a+1$

35. $a + 2 = 2a + 2$
 $\frac{2a+2}{2} = a+1$

36. $3 = 3$
 $\frac{3}{3} = 1$

37. $10000 = 10^4$ $100000 = 10^5$ $1000000 = 10^6$