

RPN Quiz Review - Answer Key

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1. Evaluate

$$6 \ 2 \ / \ 3 \ + \ 4 \ *$$

$$6/2 = 3, 3 + 3 = 6, 6 \times 4 = 24. \text{ Answer: } 24$$

2. Convert to RPN

$$(7 - 2) \times 3 + 8$$

$$\text{Answer: } 7 \ 2 \ - \ 3 \ * \ 8 \ +$$

3. Convert to algebraic notation

$$a \ b \ - \ c \ d \ + \ *$$

$$\text{Answer: } (a - b)(c + d)$$

4. Evaluate

$$9 \ 4 \ - \ 5 \ 2 \ * \ +$$

$$9 - 4 = 5, 5 \times 2 = 10, 5 + 10 = 15. \text{ Answer: } 15$$

5. Convert to RPN

$$(p + q) \times (r - s)$$

$$\text{Answer: } p \ q \ + \ r \ s \ - \ *$$

6. Convert to algebraic notation

$$x \ y \ * \ z \ w \ - \ /$$

$$\text{Answer: } \frac{xy}{z - w}$$

7. Evaluate

$$30 \sin 2 * 9 \ 3 / 2 \wedge -$$

$$\sin 30^\circ = 0.5, 0.5 \times 2 = 1, 9/3 = 3, 3^2 = 9, 1 - 9 = -8. \text{ Answer: } -8$$

8. Convert to RPN

$$12 / (4 + 2) - 1$$

$$\text{Answer: } 12 \ 4 \ 2 + / 1 -$$

9. Convert to algebraic notation

$$15 \ 3 / 4 + (\text{do not evaluate})$$

$$\text{Answer: } \frac{15}{3} + 4$$

10. Evaluate

$$18 \ 3 / 4 - 2 \wedge$$

$$18/3 = 6, 6 - 4 = 2, 2^2 = 4. \text{ Answer: } 4$$

11. Convert to RPN

$$\sqrt{m^2 + n^2}$$

$$\text{Answer: } m \ 2 \wedge n \ 2 \wedge + \text{ sqrt}$$

12. Convert to algebraic notation

$$p \ q \ r * + s \ t - /$$

$$\text{Answer: } \frac{p + qr}{s - t}$$

13. Evaluate

$$60 \cos 4 * 25 \text{ sqrt} +$$

$$\cos 60^\circ = 0.5, 0.5 \times 4 = 2, \sqrt{25} = 5, 2 + 5 = 7. \text{ Answer: } 7$$

14. Convert to RPN

$$(9 + 3) / (2 \times 2)$$

$$\text{Answer: } 9 \ 3 + 2 \ 2 * /$$

15. Convert to algebraic notation

a b c + * d -

Answer: $a(b + c) - d$

16. Evaluate

7 3 + 2 * 4 -

$7 + 3 = 10$, $10 \times 2 = 20$, $20 - 4 = 16$. **Answer:** 16

17. Convert to RPN

(u - v)(w + z) / y

Answer: u v - w z + * y /

18. Evaluate

8 3 2 * - 2 /

$3 \times 2 = 6$, $8 - 6 = 2$, $2/2 = 1$. **Answer:** 1

19. Convert to RPN

$\frac{a+b}{c-d} \times e$

Answer: a b + c d - / e *

20. Convert to algebraic notation

m n + p / q r * -

Answer: $\frac{m+n}{p} - qr$