Class Practice on Numerical Expressions(2)

Evaluate each expression.

1. \(-4 - (-4)\)
2. \(6 - (-8)\)
3. \((-3)(5)\)
4. \(1 + 2 \cdot 3 + 4\)
5. \(0 \div 5\)
6. \(5 \div 0\)
7. \(\frac{5}{6} \cdot 2\)
8. \(\frac{5}{6} \div 2\)
9. \(\frac{2}{7} \div \frac{5}{4}\)
10. \(-1 \cdot |{-6}| + |6|\)
11. \(4^{-1}\)
12. \(3^{-2}\)
13. \(2 + 7 \cdot 3 - 4^2\)
14. \(2 + 7 \cdot 3 - (-4)^2\)
15. \(\sqrt{49x^2}\)
16. \(\sqrt{50x^4}\)

17. Evaluate \(x^2 - 4\) if \(x = 4\)
18. Evaluate \(2x^2 - 4x + 1\) if \(x = 4\)
19. Evaluate \(2x^2 - 4x + 1\) if \(x = -4\)
20. Evaluate \(x^3 - 2x - 5\) if \(x = -1\)
Answers

1. $-4 - (-4) = 0$
2. $6 - (-8) = 14$
3. $(-3)(5) = -15$
4. $1 + 2 \cdot 3 + 4 = 11$
5. $0 \div 5 = 0$
6. $5 \div 0 = \text{undefined}$
7. $\frac{5}{6} \cdot 2 = \frac{10}{6} = \frac{5}{3}$
8. $\frac{5}{6} \div 2 = \frac{5}{12}$
9. $\frac{2}{7} \div \frac{5}{4} = \frac{8}{35}$
10. $-1 \cdot |{-6}| + |6| = 0$
11. $4^{-1} = \frac{1}{4}$
12. $3^{-2} = \frac{1}{9}$
13. $2 + 7 \cdot 3 - 4^2 = 7$
14. $2 + 7 \cdot 3 - (-4)^2 = 7$
15. $\sqrt{49x^2} = 7x$
16. $\sqrt{50x^4} = 5x^2\sqrt{2}$
17. Evaluate $x^2 - 4$ if $x = 4$ The answer is 12.
18. Evaluate $2x^2 - 4x + 1$ if $x = 4$ The answer is 17.
19. Evaluate $2x^2 - 4x + 1$ if $x = -4$ The answer is 49.
20. Evaluate $x^3 - 2x - 5$ if $x = -1$ The answer is $-4$. 