School786
AN ONLINE SCHOOL

Name: Due Date: Teacher: Parent Sign:

Questions

1. $8 \div 0$

2. $0 \div 8$

3. $0 \div 0$

4. $-5 \div 0$

5. $0 \div (-7)$

6. $15 \div (3 - 3)$

7. $(4 - 4) \div 5$

8. $x \div x$ when $x = 0$

9. $9 \div (2 - 2)$

10. $0 \div 2$

11. True or False: Any number divided by 0 is infinity.

12. True or False: 0 divided by any nonzero number is 0.

13. Is $0 \div 0$ undefined or indeterminate?

14. Is $7 \div 0$ undefined or indeterminate?

15. What is $(x + 2)/(x + 2)$ at $x = -2$?

16. For which x is $\frac{1}{x}$ undefined?

17. For which x is $(x - 1)/(x + 5)$ undefined?

18. For which x is $(x^2 - 9)/(x - 3)$ undefined?

19. For which x is $(x^2 - 4)/(x - 2)$ undefined?

20. For which x is $x/(x^{2)}$ undefined?

21. Solve for x: $(x + 1)/(x - 2) = 3$ (state any excluded values).

22. Solve for x: $(2x)/x = 4$ (state any excluded values).

23. Simplify $(x^2 - 1)/(x - 1)$ and say what happens at $x = 1$.

24. If you try to divide 10 apples among 0 people, what is the result (mathematically)?

25. $0 \div (\frac{1}{2})$

26. Is $\frac{0}{0}$ a number? Yes or no?

27. $5 \div 0.0$

28. For which x is $f(x) = 2/(x^2 - 4)$ undefined?

29. For which x is $g(x) = (x - 4)/(x^2 - 16)$ undefined? (Note any special case.)

30. Does $\frac{0}{x}$ equal 0 for all real x? Explain briefly.

31. Fill in the blank: A fraction is undefined when its denominator is _____.

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32. Is $(x^2 - 9)/(x - 3)$ equal to x + 3 at x = 3? Explain.

33. True or False: You may cancel common factors even when cancellation would remove a value that makes the denominator zero.

34. For which x is h(x) = 1/(x - 1) + 2 undefined?

35. Solve $\frac{x}{x} = 1$. (List all real solutions.)

36. What is 0 ÷ (-0)?

37. True or False: 0 divided by 0 equals 0.

38. What is (-0) ÷ 5?

39. Is f(x) = $(x^2 - 1)/(x - 1)$ defined at x = 1?

40. For which x is (3x)/(x + 0) undefined?

41. Simplify (2x - 2)/(x - 1) and say what happens at x = 1.

42. Which of these is an indeterminate form: $\frac{0}{0}$ or $\frac{5}{0}$?

43. Evaluate 0 ÷ (3 - 3 + 1)

44. If $\frac{a}{b} = c$ and b = 0, what can you say about c when (a) a ≠ 0 and (b) a = 0?

45. Determine the domain restrictions (values excluded) for f(x) = (x + 2)/$(x^2 + x - 6)$.

46. Simplify $(x^2 - 5x + 6)/(x - 2)$ and state what happens at x = 2.

47. Which is correct: $\frac{1}{0}$ = undefined or $\frac{1}{0} = \infty$?

48. $0 \div 10^{10}$

49. For which value of k is (k + 1)/(k - 1) undefined?

50. Does dividing by zero give a real number? Yes or no?