M/J Foundational Skills in Mathematics Grade 7, 2023-2024 Final Study Guide

1. Evaluate: $(-5)^{-10} \times (-5)^{15}$

2. Turn into a fraction in lowest terms: 0.46

3. Calculate: 13x91

4. Turn into a decimal: 13/100

5. Turn into an improper fraction: $5\frac{2}{3}$

6. Turn into a mixed number: 14/5

7. Calculate: $(\frac{2}{5} + |-5|)^2/27$

8. Calculate: $|(-\frac{2}{5})^2|+3$

9. Solve for b: $30b - 20 = -50$

10. Turn into a percentage: 3/2

11. Solve for x: 18/100 = x/50

x	2	3	8	10
y	8	12	32	40

12. Find the ratio y/x

13. $|6 - 4| - |3 - 8| = ?$

14. Solve for n: $|n - 1| + 1 = 0$

15. If y = -7, $|y - 4| = ?$

x	4	8	12	16
y	2	4	6	8

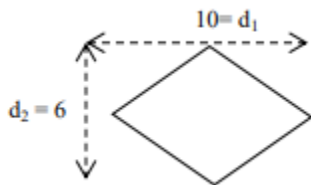16. Choose the equation representing the relationship between x and y.

6 cm

6 cm

10 cm
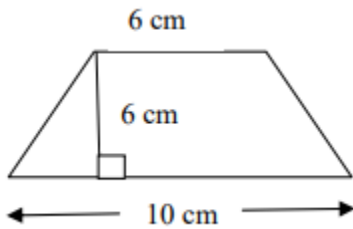
17. Find the area of the trapezoid

18. Convert: 2.5 kilometers to meters (1000 m = 1 km)

19. Divide: $-1\frac{1}{5} \div -1\frac{5}{6}$

20. Sum: $-(6/15) + (10/22)$

21. Find the area of the rhombus

22. Convert: 730 days to decades (1 year = 365 days, 1 decade = 10 years)

23. Solve for a: a + 13 < -10

24. Solve for d: d/5 – 6 = - 5

25. Express 3^3 as a number.

26. Mean, median, mode, and range of:

17, 7, 11, 13, 2, 12, 7.

27. Evaluate: 47 − 4 × 5 ÷ 4 + 8

28. Solve: 29 = k − 9
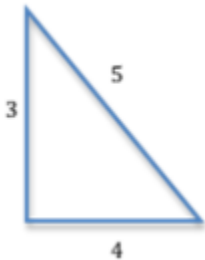
29. Distribute: 3(x − 1)

30. Evaluate p − q for the given values.

p = 2, q = 20

31. Find the quotient: –36 ÷ (–4)

32. Perimeter of the triangle below?
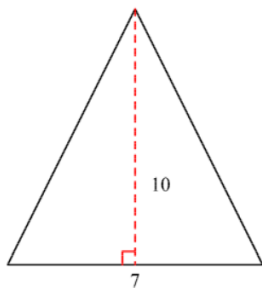

33. What is 25% of 60?

34. Solve for s: s + 12 ≤ 100

35. Evaluate: p – 14 for p = 38

36. Find the area of the triangle below:

37. Find the median: 35, 20, 30, 25, 20

38. Solve: 200 = 10n