Mathematics 8 Summer Assignment

Instructions: Please print this summer packet and complete it neatly using a pencil. You must show ALL WORK, either on the packet, or on separate paper attached to the packet. Please bring your completed summer assignment the first day of school. This assignment will be collected on the very first day and serve as one of the first grades of the marking period. Points will be taken off for lateness, or for students who do not show their work!

Name_____Date_____

Mathematics 8 Summer Assignment

1. What is the value of $*$? $\frac{6}{8} = \frac{*}{24}$

[A] 6 [B] 18 [C] 144 [D] 24

2. Write $4\frac{3}{4}$ as an improper fraction.

[A] $\frac{43}{4}$ [B] $\frac{19}{4}$ [C] $\frac{4}{19}$ [D] $\frac{4}{43}$

3. Write $\frac{38}{7}$ as a mixed number.

[A] $1\frac{5}{7}$ [B] $1\frac{6}{7}$ [C] $5\frac{7}{3}$ [D] $5\frac{3}{7}$

4. Multiply: $\frac{6}{5} \times \frac{5}{9}$

[A] $4\frac{1}{6}$ [B] $\frac{2}{3}$ [C] 1 [D] $\frac{11}{14}$

5. Divide: $2\frac{2}{7} \div 3\frac{3}{4}$

[A] $\frac{8}{21}$ [B] $\frac{3}{14}$ [C] $\frac{64}{105}$ [D] $8\frac{4}{7}$

6. Find the LCD: $\frac{3}{7}, \frac{10}{21}, \frac{1}{6}$

[A] 84 [B] 42 [C] 21 [D] 126

7. Add: $4\frac{1}{4} + 1\frac{1}{9}$

[A] $5\frac{2}{13}$ [B] 6 [C] $8\frac{3}{13}$ [D] $5\frac{13}{36}$

8. Subtract: $9 - 4\frac{1}{2}$

[A] $8\frac{1}{2}$ [B] $4\frac{1}{2}$ [C] $5\frac{1}{2}$ [D] $13\frac{1}{2}$

9. Simplify. $\left(\frac{2}{5} + \frac{1}{2}\right) \div \frac{1}{6}$

[A] $5\frac{2}{5}$ [B] $\frac{9}{20}$ [C] $\frac{3}{20}$ [D] $\frac{4}{15}$

10. Find the greatest common factor of 4 and 6.

[A] 4 [B] 2 [C] 3 [D] 1

11. Find the least common multiple of 20, 44, and 88.

[A] 880 [B] 220 [C] 440 [D] 330

12. Round 2.327 liters to the nearest tenth of a liter.

[A] 2.33 L [B] 2.4 L [C] 2.3 L [D] 2.34 L

13. Write a decimal to estimate the amount of area shaded.

[A] 2.5 [B] 0.75 [C] 0.25 [D] 0.5

14. Write 0.45 as a reduced fraction.

[A] $\frac{45}{100}$ [B] $\frac{3}{10}$ [C] $\frac{9}{20}$ [D] $\frac{4}{5}$

15. Add: 7.92 + 5.95 + 7.54

[A] 21.41 [B] 21.42 [C] 21.51 [D] 22.41

16. Solve: $x + 2.2 = 6.3$

[A] 4.1 [B] 13.86 [C] 8.5 [D] 3.1

17. Simplify: $53.8 - 4.8 \cdot 0.21$

[A] 10.29 [B] 10.311 [C] 52.792 [D] 51.792

18. Solve: $2.4 = 0.8y$

[A] 3 [B] 4 [C] 0.3 [D] 19.2

19. Complete: 16 in. = _____ ft

[A] 192 [B] $5\frac{1}{3}$ [C] $2\frac{2}{3}$ [D] $1\frac{1}{3}$

20. Complete: 50.4 mm = _____ cm

[A] 5040 [B] 5.04 [C] 504 [D] 0.504

21. Convert 10 inches to centimeters.

[A] 0.39 cm [B] 25.40 cm [C] 3.94 cm [D] 254.00 cm

22. Write the following phrase as a rate in lowest terms.

210 sales for 154 returns

[A] $\frac{11 \text{ sales}}{15 \text{ returns}}$ [B] $\frac{15 \text{ sales}}{11 \text{ returns}}$ [C] $\frac{210 \text{ returns}}{154 \text{ sales}}$ [D] $\frac{30 \text{ returns}}{22 \text{ sales}}$

23. Which of the following is NOT equal to the ratio 12 to 20?

[A] $\frac{5}{3}$ [B] 9:15 [C] $\frac{3}{5}$ [D] 3:5

24. Solve: $\frac{3}{6} = \frac{x}{24}$

[A] 5 [B] 12 [C] 9 [D] 17

25. If 4 cans of apricots cost $17.20, how many cans of apricots can be purchased with $38.70?

[A] 11 [B] 8 [C] 9 [D] 10

26. Write $2\frac{1}{4}\%$ as a decimal.

[A] 0.0225 [B] 225 [C] 0.225 [D] 2.25

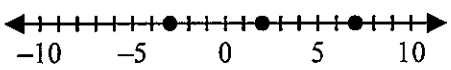
27. The regular price of a suit is \$105. It is on sale at 28% off. What is the sale price?

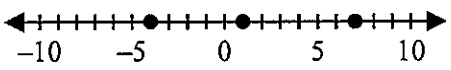
[A] \$77.00 [B] \$75.60 [C] \$29.40 [D] \$28.00

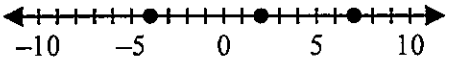
28. What percent of 5 is 1?

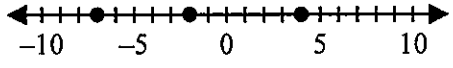
[A] $\frac{1}{20}\%$ [B] 0.2% [C] 5% [D] 20%

29. Which of the following number lines shows the graph of 7, 2, and –4?

[A] 

[B] 

[C] 

[D] 

30. Add: $(-6) + 4 + (-6)$

[A] –8 [B] –4 [C] 8 [D] 16

31. Solve: $x - 2 = 6$

[A] 4 [B] –4 [C] –8 [D] 8

32. Multiply: $(-3)(7)(-6)$

[A] 126 [B] 2 [C] –2 [D] –126

33. Simplify: $(-10)^2$

[A] –100 [B] 100 [C] –20 [D] 20

34. Simplify: $(18 + 7 \cdot 18 \div 7 - 15) \div 7$

[A] 11 [B] –4 [C] 3 [D] 449

35. Simplify: $4x+5(x+4)$

[A] $-x+20$ [B] $9x+20$ [C] $9x+4$ [D] $9x-20$

36. Subtract: $(-7) - (-4)$

[A] -11 [B] -3 [C] 3 [D] 11

37. Simplify: $-(-5)-5(9-8)$

[A] –32 [B] –10 [C] 0 [D] –58

38. Evaluate $a-b+c$ if $a=-7$, $b=-1$, and $c=-4$.

[A] -12 [B] -10 [C] -4 [D] -2

39. Evaluate $\frac{y}{2x} - z$ for $x=2$, $y=16$, and $z=1$.

[A] 3 [B] 9 [C] –6 [D] 5

40. Multiply: $-4(x+2)$

[A] $-4x+8$ [B] $-4x-2$ [C] $-4x-8$ [D] $-4x+2$

41. Simplify: $4x-8y-9x-7y$

[A] $-5x-15y$ [B] $13x-15y$ [C] $-5x+y$ [D] $13x+y$

42. Which of the following is a solution of the equation $6x-5=-6$?

[A] –11 [B] –1 [C] $-\frac{1}{6}$ [D] $-\frac{11}{6}$

43. Solve: $5x-3=37$

[A] 34 [B] 7 [C] 8 [D] 3

44. Solve: $\frac{x}{7} - \frac{x}{8} = 2$

[A] 1 [B] 56 [C] $7\frac{7}{15}$ [D] 112

45. Solve for s: $-6 = t + 5s$

[A] $s = -6 - t - 5$ [B] $s = \frac{-6-t}{5}$ [C] $s = \frac{6+t}{5}$ [D] $s = -6 - 5t$

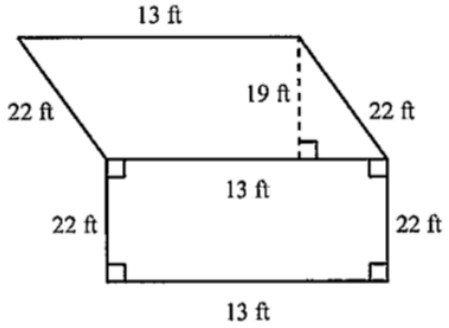
46. One side of a parallelogram has a length of 5.3 yards while another side has a length of 80.7 yards. What is the perimeter of the parallelogram?

[A] 427.71 yd [B] 172 yd [C] 91.3 yd [D] 86 yd

47. Find the circumference of a circle whose radius is 3 inches. (Use $\pi \approx 3.14$)

[A] 9.42 in. [B] 1.047 in. [C] 2.093 in. [D] 18.84 in.

48. Find the area of the region shown.

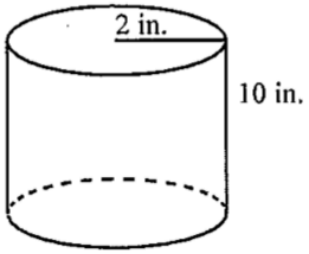


[A] 114 ft^2 [B] 704 ft^2 [C] 533 ft^2 [D] 572 ft^2

49. Find the volume of a cube 5 inches on each side.

[A] 30 $in.^3$ [B] 15 $in.^3$ [C] 125 $in.^3$ [D] 25 $in.^3$

50. Find the volume of the circular cylinder. (Use $V = \pi r^2 h$; $\pi \approx 3.14$)



[A] 62.8 $in.^2$ [B] 125.6 $in.^3$ [C] 125.6 $in.^2$ [D] 62.8 $in.^3$