Learn Math Fast's PRE-ALGEBRA Review Test

1. $-7 + -7 =$

2. $5 + -8 =$

3. $(7) - (-3) =$

4. $-\frac{3}{8} + \frac{7}{24} =$

5. $-10 - 6 =$

6. $7 \times -6 =$

7. $-5 \times -5 =$

8. $15 \div -3 =$

9. $-24 \div -8 =$

10. $-\frac{2}{7} \times 2 =$

11. $-.07 \times -.78 =$

12. $4.5 \overline{)3257.55}$

13. $\frac{3}{4}\left(-\frac{5}{8}\right) =$

14. $\frac{\frac{1}{3}}{\frac{1}{2}} =$

15. $-\frac{4}{8} \div \frac{3}{4} =$

Solve for x.

16. $10 + x = 13$

17. $10 - x = 90$

18. $5x = 30$

19. $\frac{55}{x} = 5$

20. $\sqrt{64} = x$

21. $3^2 \div 3 + 6 \times 4 = x$

Solve for x in terms of y.

22. $x - 1 = y$

23. $x + 2 = y$

24. $5 + x = y$

25. Find the slope of a line with coordinates (2, 3) and (3, 5), using $m = \frac{y_2 - y_1}{x_2 - x_1}$.

26. Find the y-intercept of the line from problem 25 using $y = mx + b$.

27. If you were to graph the line from the last problem, would the line be uphill, downhill, vertical or horizontal? _____

28. Graph a line with coordinates (-3, 5) and (4, 2). Is the slope of that line negative, positive, zero or undefined? _____

<u>ANSWERS</u>: Pre-Algebra Review Test

1. $-7 + -7 = \mathbf{-14}$ 2. $5 + -8 = \mathbf{-3}$ 3. $(7) - (-3) = \mathbf{10}$

4. $-\frac{3}{8} + \frac{7}{24} = -\frac{9}{24} + \frac{7}{24} = -\frac{2}{24} - \mathbf{\frac{1}{12}}$ 5. $-10 - 6 = \mathbf{-16}$

6. $7 \times -6 = \mathbf{-42}$ 7. $-5 \times -5 = \mathbf{25}$ 8. $15 \div -3 = \mathbf{-5}$

9. $-24 \div -8 = \mathbf{3}$ 10. $-\frac{2}{7} \times 2 = -\frac{4}{7}$ 11.

$$-.78$$
$$\underline{\times -.07}$$
$$546$$
$$\underline{+\ 000}$$
$$\mathbf{.0546}$$

12. $45.\overline{)32575.5}$ with quotient $\mathbf{723.9}$

$$\begin{array}{r}315 \\ \hline 107 \\ \underline{90} \\ 175 \\ \underline{135} \\ 405 \\ \underline{405} \\ 0\end{array}$$

13. $\frac{3}{4}\left(-\frac{5}{8}\right) = \mathbf{-\frac{15}{32}}$ 14. $\frac{\frac{1}{3}}{\frac{1}{2}} = \frac{1}{3} \times \frac{2}{1} = \mathbf{\frac{2}{3}}$ 15. $-\frac{4}{8} \div \frac{3}{4} = -\frac{4}{8} \times \frac{4}{3} = -\frac{16}{24} = \mathbf{-\frac{2}{3}}$

Solve for x.

16. $10 + x = 13$
$\underline{-10-10}$
$x = \mathbf{3}$

17. $10 - x = 90$
$\underline{-10-10}$
$-x = 80$
$x = \mathbf{-80}$

18. $5x = 30$
$5x \div 5 = 30 \div 5$
$x = \mathbf{6}$

19. $\frac{55}{x} = 5$
$x\left(\frac{55}{x}\right) = 5x$
$55 = 5x$
$\mathbf{11 = x}$

20. $\sqrt{64} = x$
$\mathbf{8 = x}$

21. $3^2 \div 3 + 6 \times 4 = x$
$(9 \div 3) + 24 = x$
$3 + 24 = x$
$\mathbf{27 = x}$

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Solve for x in terms of y.

22. $x - 1 = y$
    $\underline{+1 \quad +1}$
    $\boldsymbol{x = y + 1}$

23. $x + 2 = y$
    $\underline{-2 \quad -2}$
    $\boldsymbol{x = y - 2}$

24. $5 + x = y$
    $\underline{-5 \quad \quad -5}$
    $\boldsymbol{x = y - 5}$

25. Find the slope of a line with coordinates (2, 3) and (3, 5), using $m = \frac{y_2 - y_1}{x_2 - x_1}$.

$$m = \frac{5 - 3}{3 - 2} = \frac{2}{1} = \boldsymbol{2}$$

26. Find the y-intercept of the line from problem 25 using $y = mx + b$.

$$5 = 2(3) + b$$
$$5 = 6 + b$$
$$5 - 6 = b$$
$$-1 = b \quad \textbf{The y-intercept is -1.}$$

27. If you were to graph the line from the last problem, would the line be uphill, downhill, vertical or horizontal? **Uphill because the slope is positive.**

28. Graph a line with coordinates (-3, 5) and (4, 2). Is the slope of that line negative, positive, zero or undefined? **Negative**