

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? _____

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1. $-7 + -7 = -14$

2. $5 + -8 = -3$

3. $(7) - (-3) = 10$

4. $-\frac{3}{8} + \frac{7}{24} = -\frac{9}{24} + \frac{7}{24} = -\frac{2}{24} = -\frac{1}{12}$

5. $-10 - 6 = -16$

6. $7 \times -6 = -42$

7. $-5 \times -5 = 25$

8. $15 \div -3 = -5$

9. $-24 \div -8 = 3$

10. $-\frac{2}{7} \times 2 = -\frac{4}{7}$

11. -0.78

12. $45 \overline{)32575.5}$
 $\underline{315}$
107
 $\underline{90}$
175
 $\underline{135}$
405
 $\underline{405}$
0

$$\begin{array}{r} -0.78 \\ \times -0.07 \\ \hline 546 \\ + 000 \\ \hline .0546 \end{array}$$

13. $\frac{3}{4} \left(-\frac{5}{8}\right) = -\frac{15}{32}$

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

15. $-\frac{4}{8} \div \frac{3}{4} = -\frac{4}{8} \times \frac{4}{3} = -\frac{16}{24} = -\frac{2}{3}$

Solve for x.

16. $10 + x = 13$
 $-10 \quad -10$
 $x = 3$

17. $10 - x = 90$
 $+10 \quad +10$
 $-x = 100$
 $x = -100$

18. $5x = 30$
 $5x \div 5 = 30 \div 5$
 $x = 6$

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

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

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

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Solve for x in terms of y .

$$\begin{array}{r} 22. \quad x - 1 = y \\ \quad +1 \quad +1 \\ \hline x = y + 1 \end{array}$$

$$\begin{array}{r} 23. \quad x + 2 = y \\ \quad -2 \quad -2 \\ \hline x = y - 2 \end{array}$$

$$\begin{array}{r} 24. \quad 5 + x = y \\ \quad -5 \quad -5 \\ \hline x = y - 5 \end{array}$$

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

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

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

$$5 = 2(3) + b$$

$$5 = 6 + b$$

$$5 - 6 = b$$

$$-1 = b \quad \text{The } y\text{-intercept is } -1.$$

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**



