



Required Math Summer Review Homework

Topics in Mathematics

Please complete the problems below and bring them with you the first day of class.

Write in lowest terms

1) $\frac{25}{75}$

2) $\frac{abc}{5abc}$

3) $\frac{8x^3y}{12x^2y^3}$

Find the result in lowest terms

4) $\frac{7}{3} \div \frac{5}{6}$

5) $\frac{1}{2} \cdot \frac{1}{4} \left[\frac{1}{3} + \left(\frac{-1}{6} \right) \right]$

6) $-17 + [5 - (-7) + 2]3$

7) $8 + (3y + 3)4$

Solve for the unknown

8) 25% of X is 25. Find X

9) What % of 50 is 10

10) What % of 18 is 9

11) $9 - 5X + 1 = 15$

12) $3(X - 5) + 2X = 20$

13) $-2 < 2X - 3 < 7$

14) $\frac{13}{X} = \frac{39}{60}$

15) $|X| + 3 = 9$

16) $3X + 5 = X + 7$

Factor completely

17) $3x^2 - 2x$

18) $x^2 - 3x + 18$

Solve

19) The length of a rectangle is 1ft more than twice the width. If the perimeter is 302in. Find the dimensions of the rectangle.

20) Solve the following system of equations.

$$Y = x + 5$$

$$2x + y = 8$$

Find the x and y intercepts

21) $2x + 5y = 10$

22) $Y = 3x - 4$

Write an equation for each line with the given information

23) Slope = $\frac{1}{5}$ y intercept = (0 , 6)

24) Thru points (2 , 1) and (-1 , -5)

25) X intercept 6 y intercept 3