

Guarantee Review

1.  $8[4 + (6-2)*3] + 14/2$
  2.  $5x + 4y$  for  $x = 3, y = 6$
  3.  $x^2 - y^2 + 2$  for  $x = 4, y = 6$
  4.  $-4 - -5$
  5.  $27/-9$
  6.  $(-2x + 3y) + (6x + 4y)$
  7.  $(-3x + 4) - (2x + 2y)$
  8.  $\frac{14x^2+6}{2}$
  9.  $7x(3x + 4)$
- Solve for x
10.  $12x = 36$
  11.  $18 - x = 12$
  12.  $27 = -13 + 10x$
  13.  $5(x + 3) = 3(x - 3)$
  14.  $7x - 2(x + 6) = -2$
  15.  $\frac{6}{9} = \frac{30}{x}$
  16. Find the equation for the line containing the pts (0,1) and (1,3)
  17. Given a direct variation y is 5 when x is 12, find y when x is 36
  18. Find the slope between pts. (5,3) and (3,4)
  19. What is the slope of a vertical line?  
Horizontal line?
  20. Graph on a number line  $x \leq 3$
  21. Solve and graph:  $3x - 16 > -14$
  22. Solve and graph:  $-3 < 2x + 5 \leq 15$
  23. Solve (2 answers):  $|x| = 7$
  24. Solve (2 answers):  $|4x + 4| = 12$
  25. Solve by graphing:  $x + y = 3$   
 $3x + 2y = 8$
  26. Solve by substitution  $2x + y = 4$   
 $x + y = 1$
  27. Solve by elimination  $4x + 5y = 31$   
 $2x + 5y = 23$
  28. Graph  $2x + 3y > 18$
- Simplify
29.  $(5x^2)(3y^4)(2x^5)$
  30.  $(2x^4y^5)^3$
  31.  $\frac{(3x^2y^4)^2}{(2x^6y^7)^{-2}}$
  32. The population of Sherwinville is increasing at 12% per year. In 1995 the population was 14,000. What was the population in 2005?

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|------------------------------------|-------------------------------------|--------------------------------------|--------------------|-------------------|-----------|----------------|-----------------------|
| 1)135                              | 2)39                                | 3)-18                                | 4)1                | 5)-3              | 6)4x + 7y | 7)-5x - 2y + 4 | 8)7x <sup>2</sup> + 3 |
| 9)21x <sup>2</sup> + 28x           | 10)x = 3                            | 11)x = 6                             | 12)x = 4           | 13)x = -12        | 14)x = 2  |                |                       |
| 15)x = 45                          | 16)y = 2x + 1                       | 17)x = 15                            | 18)- $\frac{1}{2}$ | 19)Undefined/Zero |           |                |                       |
| 20)                                | 21)                                 | 22)                                  | 23)7, -7           |                   |           |                |                       |
| 24)2, -4                           | 25)about (2,1)                      | 26)(3,-2)                            | 27)(4,3)           | 28)               |           |                |                       |
| 29)30x <sup>7</sup> y <sup>4</sup> | 30)8x <sup>12</sup> y <sup>15</sup> | 31)36x <sup>16</sup> y <sup>22</sup> | 32)about 43,482    |                   |           |                |                       |