

Algebra I Homework #14

- 1) Find the equation of the line that goes through the points (-3,-7) and (-3,2)
- 2) Simplify: $\frac{96x^{-6}y^5a^{-2}}{108x^{-4}y^2a^{-3}}$
- 3) Simplify: $(4x^2 + 5x - 3)(6x^2 - x + 2)$
- 4) Simplify: $(13x - 17)^2$
- 5) Find the slope of the line that goes through the points (-8,6) and (8,-6)
- 6) Write .00000475 in scientific notation.
- 7) Simplify: $\frac{24x^2ya^3 + 54x^3y^3a^2 - 81xy^2a}{72x^2y^3a^2}$
- 8) Simplify: $\frac{3x^2 - 10x + 8}{x - 2}$
- 9) Write 5,874,000,000,000 in scientific notation.
- 10) Simplify: $\frac{36x^3y^2a^4 - 64xy^2a^3 - 108x^2y^3a^2}{48x^3y^2a^2}$
- 11) Simplify: $\frac{6x - 7 + 5x^2}{x + 3}$
- 12) Write 3.57×10^{-5} in decimal notation.
- 13) Simplify: $\frac{96x^4y^2a^2 - 27x^3y^2a^5 + 60x^2y^4a}{36x^3ya^4}$
- 14) Simplify: $\frac{-4x^2 - 5 + 3x^3}{x - 1}$
- 15) Write 9.6×10^7 in decimal notation.
- 16) Simplify: $\frac{686xya^4 - 98x^4y^5a^2 + 84x^3ya^5}{147x^4y^2a^5}$
- 17) Simplify: $\frac{27 + 8x^3}{2x + 3}$
- 18) Write .000000005183 in scientific notation.
- 19) Simplify: $\frac{216x^6y^2a^4 - x^4y^4a^3 - 162xya}{144x^5ya^3}$

Copyright © 2013 by Dr. Joseph Phillips

All rights reserved. No part of this publication may be reproduced, distributed, or transmitted in any form or by any means, including photocopying, recording, or other electronic or mechanical methods, without prior written permission from the author.

20) Simplify: $\frac{x^4 - 5x^2 + 3x - 4}{x - 4}$

Copyright © 2013 by Dr. Joseph Phillips

All rights reserved. No part of this publication may be reproduced, distributed, or transmitted in any form or by any means, including photocopying, recording, or other electronic or mechanical methods, without prior written permission from the author.