

NAME _____

DATE _____

PER. _____

SIMPLIFYING RADICAL EXPRESSIONS

Simplify.

1) $\sqrt{9c^2} =$	2) $\sqrt{c^2d^2} =$
3) $\sqrt{4x^4y^8} =$	4) $\sqrt{25r^8s^{16}t^{12}} =$
5) $\sqrt{x^{11}} =$	6) $\sqrt{x^2y^3} =$
7) $\sqrt{49a} =$	8) $\sqrt{27m^2} =$
9) $6\sqrt{8r^3} =$	10) $\sqrt{20x^2y^3} =$
11) $-7\sqrt{24a^3b^7} =$	12) $x^2\sqrt{4x^6y^4z^5} =$

13) $\sqrt{9a^3b^3c^6} =$	14) $\sqrt{12r^4s^5t^8} =$
15) $\sqrt{72x^5y^4z^7} =$	16) $5u^2z\sqrt{18y^3u^6z^8} =$
17) $rs^2t\sqrt{50r^9s^9t^7} =$	18) $\sqrt{625} =$
19. What is the equation of a line that has a slope of 4 and goes through the point (3, -2)?	20. What is the x-intercept of the line $4x - y = 12$?

Answers in random order: $xy\sqrt{y}$, $12r\sqrt{2r}$, $-14ab^3\sqrt{6ab}$, $6x^2y^2z^3\sqrt{2xz}$, $x^5\sqrt{x}$, (3, 0), $y = 4x - 14$, cd , $2x^2y^4$, $3m\sqrt{3}$, $3abc^3\sqrt{ab}$, $15yu^5z^5\sqrt{2y}$, $5r^5s^6t^4\sqrt{2rst}$, $2x^5y^2z^2\sqrt{z}$, 25, 3c, $5r^4s^8t^6$, $2xy\sqrt{5y}$, $2r^2s^2t^4\sqrt{3s}$, $7\sqrt{a}$