

Algebra 1

Name: _____

Simplifying and Solving Test Review

① $7y(3ym)$

② $3a(-6a-4b+2)$

③ $(-7x^2+4)(10x^2+3)$

④ $(-a+6)(3a-4)$

Solve each equation.

⑤ $|3x-5|=16$

⑥ $|2x-3|=23$

⑦ $(x-1)(x+7)=(x+1)(x-3)$

⑧ $2x-5(x+4)=-2(x+3)$

Simplify. Your answer should contain only positive exponents.

⑨ $4xy^4 \cdot 2x^3 \cdot 4x^4y^3$

⑩ $(3a^4)^4$

⑪ $(6a^{-7}b^3)^3$

⑫ $\frac{5m^6}{5m^2n}$

$$(13) \frac{5ab}{(5a^4b^7)^0}$$

$$(14) \frac{7m^5}{8m^0}$$

$$(15) y^{-5}$$

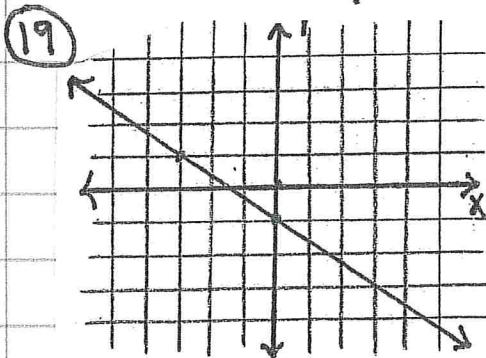
$$(16) \frac{20a^5b^3}{6a^3b^8}$$

Solve each equation below for y . List the slope and y -intercept

$$(17) 3x - 2y = 21$$

$$(18) -10 + 7y - 3x = 5x + 3y$$

Determine the equation of each line using the given representations



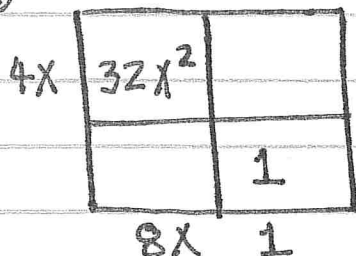
(20) through: $(5, 2)$, slope = -4

(21)

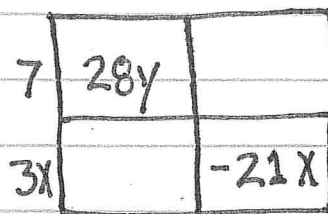
x	-2	-1	0	1	2	3	4	5	6
y	8	5	2	-1	-4	-7	-10	-13	-16

Find the missing dimensions for each generic rectangle below.
Then write the area as a sum and as a product.

(22)



(23)



(24) Two brothers Martin and Horace are in their backyard. Horace is taking down a brick wall on one side of the yard while Martin is building a brick wall on the other side. Martin lays 2 bricks every minute. Meanwhile, Horace takes down 3 bricks each minute from his wall. They both start working at the same time. It takes Horace 55 minutes to finish tearing down his wall.

(a) How many bricks were originally in the wall that Horace started tearing down?

(b) Represent the situation with equations, tables, and a graph.

(c) When did the two walls have the same number of bricks?