

Algebra I

9.2 Worksheet

Product Rule of Powers
Quotient Rule of Powers

NAME: _____
DATE: _____ HOUR: _____

Simplify. Your answer should contain only positive exponents.

1) $n^2 n^3$

2) $2x^2 \cdot x^3$

3) $3a \cdot 3a$

4) $x^2 \cdot 2x^2 \cdot 3x$

5) $3x^3 \cdot 3x$

6) $3n^3 \cdot n^2 \cdot 3n^2$

7) $3k^2 \cdot 2k^2$

8) $3p \cdot 2p$

9) $2x^2 \cdot x^3$

10) $2n^2 \cdot 2n^2$

11) $2m^2 \cdot m^2$

12) $2r^2 \cdot r^3$

13) $x \cdot 3x^2$

14) $3n \cdot 3n^2$

15) $\frac{2b^2}{b^2}$

16) $\frac{2v^2}{v}$

17) $\frac{3x^2}{x}$

18) $\frac{n^3}{3n^2}$

19) $\frac{2a^3}{3a^3}$

20) $\frac{3k^2}{3k^3}$

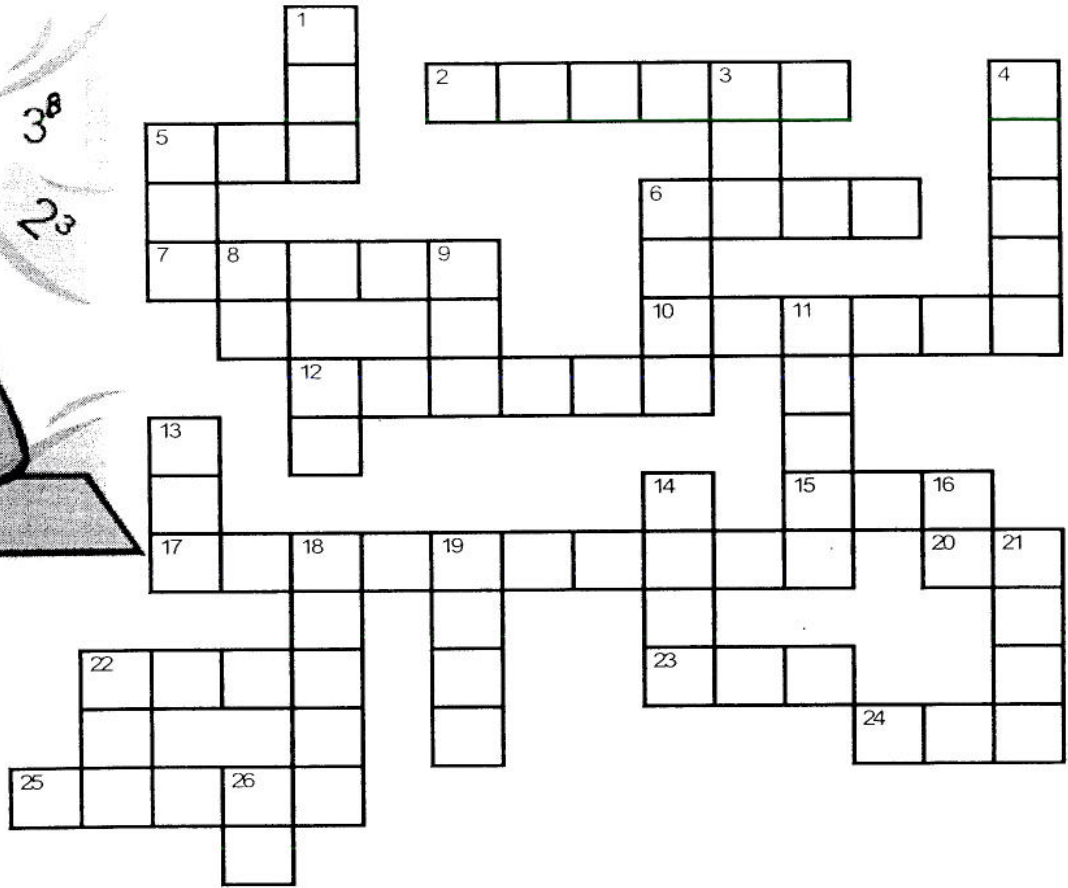
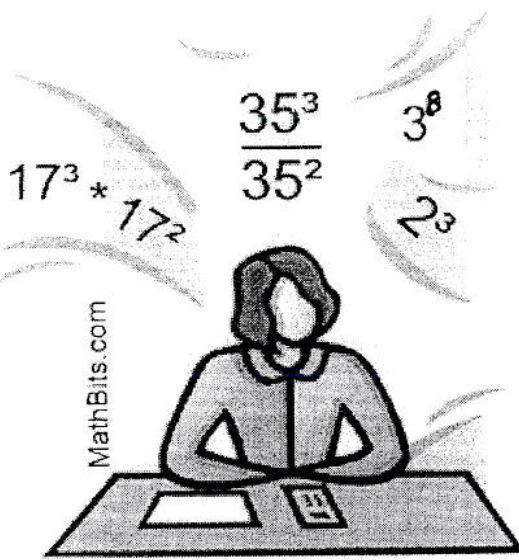
21) $\frac{3p^2}{2p^2}$

22) $\frac{3m}{m^2}$

23) $\frac{p^2}{2p^3}$

24) $\frac{2x^3}{x^2}$

Number Exponents



Across

2 $712^4 / 712^2$

5 $5(12^4 / 12^2)$

6 $2^3 \times 2^8$

7 312^2

10 $320^4 / 320^2$

12 $6^4 \times 6^3$

15 $15^8 / 15^6$

17 $185^6 / 185^2$

20 $10^2 - 59$

22 $11^5 / 11^2$

23 $10^2 \times 8$

24 $6(10^2 + 8^2)$

25 $10^4 + 65$

Down

1 $5(5^2) + 5(5^3)$

3 $(4 \times 10^2) + (3 \times 10)$

4 $10^3 \times 10 \times 9$

5 $3^4 \times 3^2$

6 46^2

8 $8^1 + 8^2$

9 $8^3 - 83$

11 $145^4 / 145^2$

12 $26^4 / 26^3$

13 $1 + 10^1 + 10^2$

14 $8(8^2 + 8^3)$

16 $54^3 / 54^2$

18 $5^3 \times 5^4$

19 $6(16 + 8)^2$

21 $38^3 / 38$

22 $10^8 / 10^6$

26 $2^2 \times 2^4$