Algebra Bellwork - September 29, 2011

Evaluate $\frac{3}{4}p - 5$ for $p = -4$

$\left(\frac{3}{4}\right)\left(\frac{-4}{1}\right) - 5 = -3 + -5$

-8

$\left(\frac{3}{4}\right)\left(\frac{-4}{1}\right)^{-1} - 5$

$-3 + -5$

-8

---

13) -12

14) 12

18) -13

19) 48

Evaluate each expression for $m = -4$, $n = 3$, and $p = -1$.

13. mn

14. $-mn$

15. $3m - n$

16. $-5p$

17. $2m$

18. $7p - 2n$

19. $8p \cdot (-2n)$

20. $p \cdot (m + n)$

21. mnp

22. $m \cdot (3 + p)$

23. $4n^3 \cdot m$

24. $m \cdot p + (-n)$

$8(-1) \cdot (-2)(3)$

$-8 \cdot -2 \cdot 3$

$16 \cdot 3$

48

$$\frac{24}{32} \div \frac{4}{7}$$

$\frac{24}{32} \cdot \frac{7}{4}$ $\frac{42 \div 2}{32 \div 2}$ $\boxed{\frac{21}{16}}$ $1\frac{5}{16}$

Dividing Fractions
Use the RECIPROCAL

$$\frac{4}{5} \div \frac{3}{7}$$

$\frac{4}{5} \cdot \frac{7}{3}$

$\frac{28}{15}$

$\frac{4}{5}$ / $\frac{3}{7}$

$\frac{10}{5}$ $\frac{5}{10}$

$\frac{6}{9}$ $\frac{2}{3}$

$\frac{9}{6}$ $\frac{3}{2}$

54. $\frac{x}{y}$, for $x = \frac{2}{5}$ and $y = \frac{3}{10}$

$$\frac{\frac{2}{5}}{\frac{3}{10}}$$

$$\frac{2}{5} \div \frac{3}{10}$$

$$\frac{2}{5} \cdot \frac{10}{3} = \frac{20}{15}$$

$$= \frac{4}{3}$$

-3^2

$-(3)(3)$

-9

$(-3)^2$

$(-3)(-3)$

9

$-(-3)^2$

$-(-3)(-3)$

-9

Evaluate each expression for $x = -12$ and $y = 4$.

25. $xy - 4y$ **26.** $2xy + 9$ **27.** $x + 4y$

28. $-x + 3y$ **29.** $3y - 2x$ **30.** $6y + x$

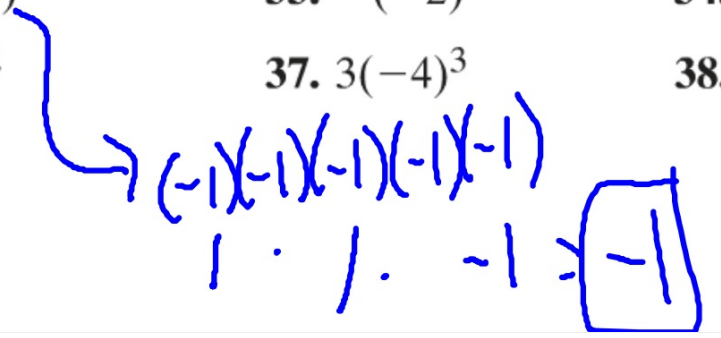
31. The expression $w = -22 + \frac{13}{10}t$, where t is the actual air temperature, gi approximate wind chill temperature w when the wind speed is 20 mi/h. the approximate wind chill temperature for the given air temperatures a 20 mi/h wind.

a. 10°F **b.** −24°F **c.** −8°F **d.** 5°F

Simplify each expression.

32. $(-1)^5$ **33.** $-(-2)^3$ **34.** -5^2 **35.** $(-9)^2$

36. -9^2 **37.** $3(-4)^3$ **38.** $-5(-1)^4$ **39.** $-5^2(-$



40. $\frac{6}{-3}$ -2

41. $\frac{-36}{9}$ -4

42. $\frac{3 + -14}{-2}$ $\frac{-11}{-2}$

43. $-18 \div (-3)$

44. $-121 \div 11$

45. $-64 \div (-5)$

46. $2^3 \div (-4)$

47. $-56 \div (4 + 3)$

$\frac{11}{2}$ 5.5