

sec 1.8

6-19-14

3.

$$x \cdot x \cdot x \cdot x \cdot x \cdot x$$

$$= x^6 \quad \text{BASIC definition} \\ \text{(math 104)}$$

$$b^n = \underbrace{b \cdot b \cdot b \cdot \dots \cdot b}_{n\text{-factors}}$$

sec. 1.8, #55.

$$5.7 - 4.3^2 - 2$$

2

MICROSCORE

$(-2)^2$	\neq	-2^2
$(-2)(-2)$	\neq	$(-1)(4) = -4$
$= 4$		

$$\begin{aligned} -2^2 &= (-1) \cdot 2^2 \\ &= (-1) \cdot 4 \\ &= -4 \end{aligned}$$

sec 1.8

(53)

comment:

$$5 - 3 \cdot (-1)$$

$$\Rightarrow 5 - (-3) = 5 + 3 = 8$$

$$3 \cdot (-1) = -3 = (-3)$$

alt. way

$$5 - (-3)$$

$$= 5 + (\text{opposite of } -3)$$

$$= 5 + (3)$$

$$= 8$$

6-19-14

1

Scroll down for answers to 1 to 12.

Real Quiz 1 SU14 MATH 65-083 CRN: 10113;
DO PROBLEMS 1 TO 12 IN CLASS; THE **REST ARE TAKE HOME** (13 TO 24). Write on white pages with this test sheet. Turn in your written work only on white sheets; **SEPARATE** papers and take test sheet home and do the Take Home Part **BELOW**.

The first 4 problems are from sec. 1.1.

1. Evaluate $(p + q)/q$ for $p = 0$ and $q = 3$.
2. If $b = 6$ ft and $h = 8$ ft for a rectangle, what is the area?
3. Translate the following to mathematics, the international language of the world ! 6 MORE than the product of two numbers is 67.5.
4. Translate the following equation into mathematics. When 42 is SUBTRACTED from a number, the result is 2314. For extra credit, solve.

The next 3 problems are from 1.2

5. Factor: $10 + 10x + 30y + 30z$
6. Factor: $60a + 120b$
7. Multiply: $(3x + y + 12)6$
8. SEC. 1.3. Find the prime factorization of 2500.
9. SEC. 1.3. Perform the indicated operation: ADD. $1/2 + 3/4$
10. SEC. 1.3. Divide and simplify if possible: $(2/3) \div (7/10)$. This means $2/3$ divided by $7/10$.
11. SEC. 1.5. Add. $111 + (-136) + 22$
12. SEC. 1.6. Subtract: $2 - (-100) - (-3)$

QUIZ 1 MATH 65 SECTION 083 SU14 - TAKE HOME
SECTION - #13 TO #24 ARE DUE MONDAY.

13. SEC. 1.3. Simplify fully $210/98$, by reducing to lowest terms.
14. SECTION 1.4 :
 - (a) Is this sentence TRUE OR FALSE? $-1000 < -999$. Write TRUE OR FALSE.
 - (b) Find the absolute value: $|x|$, for $x = -67.2$
 - (c) Is this sentence TRUE OR FALSE? $|-1000| < 124,564$. Write TRUE OR FALSE.
 - (d) List in order from least to greatest, from left to right.
 $13, -12.5, -17, -123, 123, -122.5, 14, -2, 0, \sqrt{5}$

15. SEC. 1.5. Add. $36 + (-14) + (-19) + (-6) + 1 + (-1) + 2 + (-2) + 36$.

The next probs. are from sec 1.6

16. Find the opposite of 89.1

17. Subtract: $6 - (-14)$

18. Subtract: $-15 - (-14)$

19. Subtract: $2 - (-100)$

20. Subtract: $2 - 100$

21. Combine like terms: $-2 - 6t + 10 + 2t + 5 - 7t$

22. Combine like terms: $-5y - (-3x) + 9x - (-1) - 2y - (-9)$

23. Combine like terms: $5y - (-4x) + 8x - (-5) - 3y - 7 + 3x$

24. (a) Find $-(-x)$ when $x = -3$. (b) Find $-(-(-x))$ when $x = -4$.
(c) Find $-(-(-(-x)))$ when $x = 7$.

QUIZ SOLUTIONS

$$(1) \frac{p+q}{7} \quad p=0$$
$$q=3$$

$$\frac{0+3}{7} = \frac{3}{7} = 1$$

$$(2) (6ft)(8ft)$$
$$= 48ft^2$$

$$(3) 6 + ab = 67.5$$

$$(4) \begin{array}{r} x - 42 = 2314 \\ + 42 \quad + 42 \\ \hline \end{array}$$

$$x = 2356$$

$$(5) 10 + 10x + 30y + 30z$$
$$= 10(1 + x + 3y + 3z)$$

(6)

$$60a + 120b$$

$$60 = \text{LCD}$$

$$\underline{60} \cdot a + \underline{60} \cdot 2 \cdot b$$
$$= \underline{60} \cdot (1 \cdot a + 2 \cdot b)$$
$$= 60(a + 2b)$$

$$(7) (3x + y + 12) \cdot 6$$
$$= 18x + 6y + 72$$

$$(8) 2500$$

$$= 100 \cdot 25$$

$$= 10 \cdot 10 \cdot 25$$

$$= 2 \cdot 5 \cdot 2 \cdot 5 \cdot 5 \cdot 5$$

$$(9) \frac{1}{2} + \frac{3}{9}$$
$$= \frac{1}{2} \cdot \frac{2}{2} + \frac{3}{9} \cdot \frac{1}{1} = \frac{2+3}{4}$$
$$= \frac{5}{4}$$

(2)

QVI 1 solutions

$$(10) \quad \frac{2}{3} \times \frac{7}{10} = \frac{2}{3} \times \frac{10}{7}$$

$$= \frac{20}{21}$$

$$(11) \quad 111 + (-136) + 22 \\ = 133 + (-136) \\ = -(136 - 133) = \boxed{-3}$$

$$(12) \quad 2 - (-100) - (-3) \\ = 2 + 100 + 3 = \boxed{105}$$