



Warm up Grade 6



Test tomorrow

Date: Oct. 2

1) Given ~~+6, -8~~, -10, +7, +2, 0, -1, -3, -7

a) List the integers that are greater than -2 +6, +7, +2, 0, -1

b) Which integers are between -10 and -5. -8, -7
~~-10, -9, -8, -7, -6, -5~~

2) Write in written form:

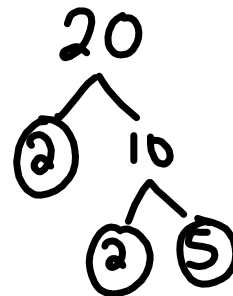
a. 60 203 465

Sixty million two hundred three thousand four hundred sixty-five

3) Write the PRIME factors of 20 (Show work)

$$\begin{array}{r} 20 \\ \hline 1 \times 20 \\ 2 \times 10 \\ 4 \times 5 \end{array}$$

OR



Factors 1, 2, 4, 5, 10, 20

Prime: 2, 5

Page 72

#1a,b,c,d,e,f,

#2

#4a,c,e,g (Show work but can use a cal)

#5a,c,e,g,i

#6(a,b,c,d)

Homework Solutions



$$1a) 18 + 4 \times 2$$

$$= 18 + 8$$

$$= 26$$

$$1b) 25 - 12 \div 3$$

$$= 25 - 4$$

$$= 21$$

$$1c) 24 + 36 \div 9$$

$$= 24 + 4$$

$$= 28$$

$$1d) 12 - 8 - 4$$

$$= 4 - 4$$

$$= 0$$

$$1e) 50 - 7 \times 6$$

$$= 50 - 42$$

$$= 8$$

$$1f) 7 \times (2 + 9)$$

$$= 7 \times (11)$$

$$= 77$$

$$2) 9 + 6 \times 3$$

$$= 9 + 18$$

$$= 27$$

$$4a) 322 - 294 \div 49$$

$$= 322 - 6$$

$$= 316$$

$$4c) 312 \times 426 - 212 \times 158$$

$$= 132\,912 - 212 \times 158$$

$$= 132\,912 - 33\,496$$

$$= 99\,416$$

$$4c) 156 \times 283 + 215 \times 132$$

$$= 44\,148 + 215 \times 132$$

$$= 44\,148 + 28\,380$$

$$= 72\,528$$

$$4g) (148 + 216) \times (351 - 173)$$

$$= (364) \times (351 - 173)$$

$$= 364 \times 178$$

$$= 64\,792$$

Page 72

#1a,b,c,d,e,f,

#2

#4a,c,e,g (Show work but can use a cal)

#5a,c,e,g,i

#6(a,b,c,d)

Homework Solutions



$$\begin{aligned}
 5a) \quad & 20\,000 - 400 \times 2 \\
 &= 20\,000 - 800 \\
 &= 19\,200
 \end{aligned}$$

$$\begin{aligned}
 5c) \quad & (1000 + 6000) \times 3 \\
 &= 7000 \times 3 \\
 &= 21\,000
 \end{aligned}$$

$$\begin{aligned}
 5e) \quad & 5 \times (4 + 11) \\
 &= 5 \times (15) \\
 &= 75
 \end{aligned}$$

$$\begin{aligned}
 5g) \quad & (50 + 50) \div 50 \\
 &= 100 \div 50 \\
 &= 2
 \end{aligned}$$

$$\begin{aligned}
 5i) \quad & 16 \div 2 \times 9 \\
 &= 8 \times 9 \\
 &= 72
 \end{aligned}$$

$$\begin{aligned}
 6a) \quad & 4 \times 7 - 2 + 1 \\
 &= 28 - 2 + 1 \\
 &= 26 + 1 \\
 &= 27
 \end{aligned}$$

$$\begin{aligned}
 6b) \quad & 4 \times (7 - 2) + 1 \\
 &= 4 \times (5) + 1 \\
 &= 20 + 1 \\
 &= 21
 \end{aligned}$$

$$\begin{aligned}
 6c) \quad & 4 \times 7 - (2 - 1) \\
 &= 4 \times 7 - (1) \\
 &= 28 - 1 \\
 &= 27
 \end{aligned}$$

$$\begin{aligned}
 6d) \quad & 4 \times (7 - 2 + 1) \\
 &= 4 \times (5 + 1) \\
 &= 4 \times 6 \\
 &= 24
 \end{aligned}$$

REMEMBER



Rules for Order of Operations



- * Do the operations in brackets (we use brackets first if we want certain operations carried out first)
- * Multiply and divide, in order from left to right
- * Then add and subtract, in order, from left to right.

acronym

Brackets

Exponents (grade 8)

Division

Multiplication

Addition

Subtraction

} Do what comes first in the expression

} Do what comes first in the expression



You try

Use mental math (No calculators)

BEDMAS

$$\begin{aligned}
 1) \quad & 8 + 100 \div 4 \\
 & \downarrow \quad \quad \downarrow \\
 & = 8 + 25 \\
 & = 33
 \end{aligned}$$

$$\begin{aligned}
 2) \quad & 8 + (15 + 5) \div 2 \\
 & = 8 + 20 \div 2 \\
 & = 8 + 10 \\
 & = 18
 \end{aligned}$$

$$\begin{aligned}
 3) \quad & 10 + 8 \times 7 \div 2 \\
 & = 10 + 56 \div 2 \\
 & = 10 + 28 \\
 & = 38
 \end{aligned}$$

BEDMAS

Test Outline

45 points

Can use calculators but must show work

- Write numbers in standard form, written form or expanded
- Write the multiples of a number
- Must know the definition of a prime number and a composite number and be able to give an example of each.
- Study*
- Must know the first 5 prime numbers are 2,3,5,7,11
- Definition of prime*
- Must be able to find common multiples of 2 or more numbers.
- Must be able to list the factors of a number using rainbow or factor pairs
- Must be able to list prime factors of a number using trees
- Given a list of integers be able to indicate which is larger or smaller when comparing (Order from least to greatest or greatest to least)
- 3 BEDMAS questions
- Word problem questions similar to our warm-ups

Class/Homework

YOU MUST show work

today

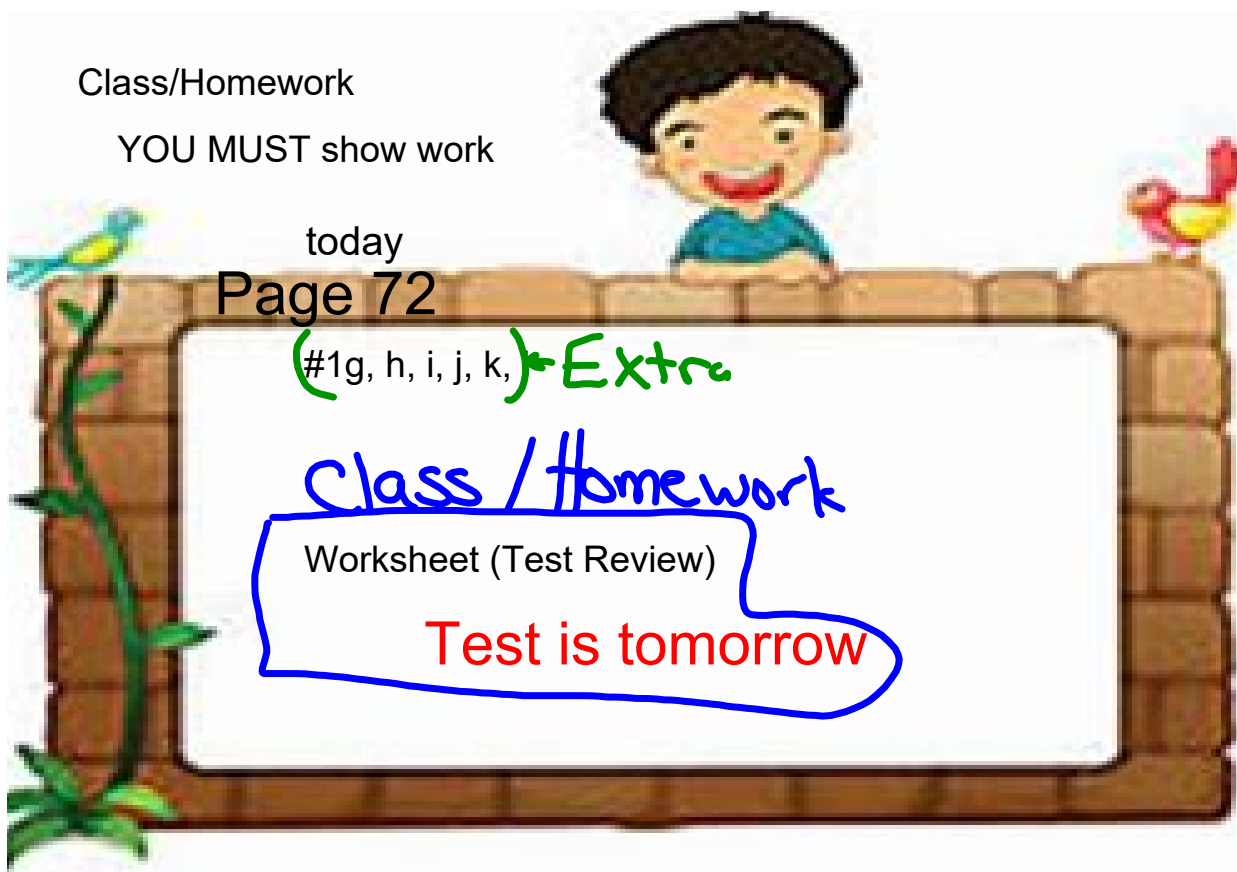
Page 72

(#1g, h, i, j, k) ← Extra

Class / Homework

Worksheet (Test Review)

Test is tomorrow



Name _____ Date _____

Grade 6 Math**Ch. 2 Understanding Numbers: Test Review**

1. Evaluate each expression. Use the order of operations.

a) $24 \div 6 \times 7$

b) $38 - 16 \div 4$

c) $55 + 15 \div 3$

d) $7 \times (4 + 8)$

e) $28 \div (16 - 9)$

f) $50 - 16 + 4$

2. Use mental math to evaluate.

a) $(70 \times 2) \div 7$

b) $10\,000 - 3000 \times 3$

c) $(3000 + 2000) \div 50$

d) $180 \div (2 \times 9)$

3. Callie bought 3 packages of drinking boxes.

Each package has 6 drinking boxes.

Callie shared the drinking boxes equally among 9 children.

How many drinking boxes did each child get?

Write a number sentence to show the order of operations you used.

4. List the first 7 multiples of 4

5. List the factors of 72 (You can use a calculator to help)

6. What are the common factors of 30 and 20?

7. Write the following number in expanded form 706 254 003 021.

8. Write the written form for the above number in question 7.

9. Order the integers from greatest to least +45, -15, -17, +7, 0, -2, +10

10. Do the prime factorization (Tree) of 28.

11. Model -7 with tiles

key

Ch.2

Gr 6 Test Review

$$1a) \quad 24 \div 6 \times 7$$

$$= \quad \underbrace{4} \times 7$$

$$= \quad 28$$

$$b) \quad 38 - 16 \div 4$$

$$= \quad 38 - 4$$

$$= \quad 34$$

$$c) \quad 55 + 15 \div 3$$

$$= \quad 55 + 5$$

$$= \quad 60$$

$$1d) \quad 7 \times (4 + 8)$$

$$= \quad 7 \times 12$$

$$= \quad 84$$

$$1e) \quad 28 \div (16 - 9)$$

$$= \quad 28 \div 7$$

$$= \quad 4$$

$$1f) \quad 50 - 16 + 4$$

$$= \quad 34 + 4$$

$$= \quad 38$$

$$2a) \quad (70 \times 2) \div 7$$

$$= \quad 140 \div 7$$

$$= \quad 20$$

$$b) \quad 10000 - 3000 \times 3$$

$$= \quad 10000 - 9000$$

$$= \quad 1000$$

$$c) \quad (3000 + 2000) \div 50$$

$$= \quad 5000 \div 50$$

$$= \quad 100$$

$$d) \quad 180 \div (2 \times 9)$$

$$= \quad 180 \div 18$$

$$= \quad 10$$

$$3) \quad (3 \times 6) \div 9$$

$$= \quad 18 \div 9$$

$$= \quad 2$$

Each child gets 2 juice boxes.

4) Multiples of 4 \rightarrow 4, 8, 12, 16, 20, 24, 28

$$5) \quad \underline{72}$$

$$1 \times 72$$

$$2 \times 36$$

$$3 \times 24$$

$$4 \times 18$$

$$6 \times 12$$

Key

6) Factors

$$\begin{array}{l} \underline{30} \\ 1 \times 30 \\ 2 \times 15 \\ 3 \times 10 \\ 5 \times 6 \end{array}$$

$$\begin{array}{l} \underline{20} \\ 1 \times 20 \\ 2 \times 10 \\ 4 \times 5 \end{array}$$

Factor of 30 \rightarrow ①, ②, 3, ⑤, 6, ⑩, 15, 30

Factors of 20 \rightarrow ①, ②, 4, ⑤, ⑩, 20

Common Factors of (20, 30) are 1, 2, 5, 10

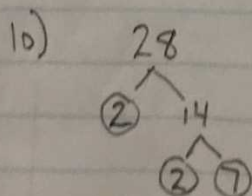
7) 706 254 003 021

$$700\,000\,000\,000 + 6\,000\,000\,000 + 200\,000\,000 + 50\,000\,000 + 4\,000\,000 + 3000 + 20 + 1$$

8) seven hundred six billion two hundred fifty-four million three thousand twenty-one

9) +45, -15, -17, +7, 0, -2, +10 greatest to least

+45, +10, +7, 0, -2, -15, -17



11) -7 as tiles
○○○○○○○

Practice

1. Evaluate each expression.

Use the order of operations.

a) $18 + 4 \times 2$ b) $25 - 12 \div 3$ c) $24 + 36 \div 9$

d) $12 - 8 - 4$ e) $50 - 7 \times 6$ f) $7 \times (2 + 9)$

g) $81 \div 9 - 6$ h) $25 \div (9 - 4)$ i) $13 - 6 + 8$

j) $(9 + 6) \div 3$ k) $19 + 56 \div 8$ l) $8 \times (12 - 5)$

$$\begin{aligned} \text{g)} \quad & 81 \div 9 - 6 \\ & = 9 - 6 \\ & = 3 \end{aligned}$$

$$\begin{aligned} \text{h)} \quad & 25 \div (9 - 4) \\ & = 25 \div (5) \\ & = 5 \end{aligned}$$

$$\begin{aligned} \text{i)} \quad & 13 - 6 + 8 \\ & = 7 + 8 \\ & = 15 \end{aligned}$$

$$\begin{aligned} \text{j)} \quad & (9 + 6) \div 3 \\ & = 15 \div 3 \\ & = 5 \end{aligned}$$

$$\begin{aligned} \text{k)} \quad & 19 + 56 \div 8 \\ & = 19 + 7 \\ & = 26 \end{aligned}$$

$$\begin{aligned} \text{l)} \quad & 8 \times (12 - 5) \\ & = 8 \times 7 \\ & = 56 \end{aligned}$$

5. Use mental math to evaluate.

a) $20\,000 - 4000 \times 2$

b) $6 + 125 \div 25$

c) $(1000 + 6000) \times 3$

d) $60 \times 3 \div 9$

e) $5 \times (4 + 11)$

f) $50 + 50 \div 50$

g) $(50 + 50) \div 50$

h) $9 \times 10 - (30 + 30)$

i) $16 \div 2 \times 9$

j) $200 - 200 \div 20$

$$\begin{aligned} 5b) \quad & 6 + 125 \div 25 \\ & = 6 + 5 \\ & = 11 \end{aligned}$$

$$\begin{aligned} 5d) \quad & 60 \times 3 \div 9 \\ & = 180 \div 9 \\ & = 20 \end{aligned}$$

$$\begin{aligned} 5f) \quad & 50 + 50 \div 50 \\ & = 50 + 1 \\ & = 51 \end{aligned}$$

$$\begin{aligned} h) \quad & 9 \times 10 - (30 + 30) \\ & = 9 \times 10 - 60 \\ & = 90 - 60 \\ & = 30 \end{aligned}$$

$$\begin{aligned} j) \quad & 200 - 200 \div 20 \\ & = 200 - 10 \\ & = 190 \end{aligned}$$

