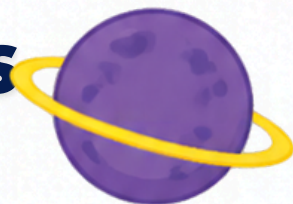




Numerical Expressions Through Space



Order of Operations and Early Algebra

Name:

Date:

Section 1: Order of Operations

Multiply and divide first. Then add and subtract.

Example

$$2 + 3 \times 4 = 2 + 12 = 14$$

1) $6 + 4 \times 3 = \underline{\quad}$

2) $20 - 8 \div 2 = \underline{\quad}$

3) $5 \times 4 + 2 \times 3 = \underline{\quad}$

4) $18 \div 3 + 7 = \underline{\quad}$

5) $30 - 4 \times 5 + 2 = \underline{\quad}$





Section 2: Parentheses and Brackets

Work inside the parentheses first. Then work inside the brackets.

Example

$$5 \times (6 - 2) = 5 \times 4 = 20$$

1 $3 \times (4 + 5) = \underline{\hspace{2cm}}$

2 $(12 - 4) \times 2 = \underline{\hspace{2cm}}$

3 $24 \div (2 + 4) = \underline{\hspace{2cm}}$

4 $2 \times [3 + (10 - 6)] = \underline{\hspace{2cm}}$

5 $[18 - (5 + 3)] \times 4 = \underline{\hspace{2cm}}$



Section 3: Write the Expression

Write an expression for the words. Then find its value.

Example

Add 2 and 6, then multiply by 3. Expression: $(2 + 6) \times 3 = 24$

1) Add 8 and 7, then multiply by 2.

Expression:

Value:

2) Subtract 5 from 12, then multiply by 3.

Expression:

Value:

3) Multiply 6 by 4, then add 9.

Expression:

Value:

4) Divide 36 by 9, then add 5.

Expression:

Value:

5) Add 3 and 9, then divide by 4.

Expression:

Value:





Section 4: Compare the Expressions

Find the value of both expressions. Circle the one that is greater.

Example

$2 \times (3 + 4) = 14$ and $2 \times 3 + 4 = 10$. The first is greater.

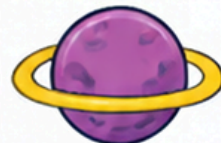
1) $4 \times (3 + 2)$ or $4 \times 3 + 2$

2) $30 - (10 - 4)$ or $30 - 10 - 4$

3) $(8 + 4) \div 2$ or $8 + 4 \div 2$

4) $2 \times (9 - 3)$ or $2 \times 9 - 3$





Teacher Copy: Answer Key

Section 1:

1) 18

4) 13

2) 16

5) 12

3) 26



Section 2:

1) 27

4) 14

2) 16

5) 40

3) 4

Section 3:

1) $(8 + 7) \times 2 = 30$

2) $(12 - 5) \times 3 = 21$

3) $6 \times 4 + 9 = 33$

4) $36 \div 9 + 5 = 9$

5) $(3 + 9) \div 4 = 3$



Section 4:

1) $4 \times (3 + 2) = 20$ is greater than 14

2) $30 - (10 - 4) = 24$ is greater than 16

3) $8 + 4 \div 2 = 10$ is greater than 6

4) $2 \times 9 - 3 = 15$ is greater than 12

