

September 6

You Need:

- 1.) Your Binder
- 2.) Pencil
- 3.) Calculator

Agenda:

- 1.) POD
- 2.) Section 1-2

POD

James has 28 marbles. He puts them into 4 bags. He puts the same number of marbles in each bag. How many marbles are in each bag?

$$\begin{array}{r} 28 \\ : 4 \\ \hline 7 \end{array}$$

Math IV Lesson 2

Multiplication and Division Expressions

Review:

Circle the variable: $6x$ $3x + 7$ $4 + 3x$

Evaluate the expression when $x = 3$ and $y = 5$

$$\begin{array}{c} x + 4 \\ 3 + 4 \\ 7 \end{array}$$

$$\begin{array}{c} y - 2 \\ 5 - 2 \\ 3 \end{array}$$

$$\begin{array}{c} x + y \\ 3 + 5 \\ 8 \end{array}$$

Warm-Up Exercises

Find each answer.

1. 23×6

2. 48×47

3. $4506 \div 6$

4. $6372 \div 9$

Multiplying Expressions

In algebra, it is important to realize that you can show both multiplication and division in a number of different ways.

These represents multiplication.

times sign
 7×5

raised dot
 $7 \cdot 5$

parentheses
 $(7)5$ or $7(5)$ or $(7)(5)$

These represents Division.

division sign
 $42 \div 7$

division house
 $7 \overline{)42}$

fraction bar
 $\frac{42}{7}$

* when a number and variable are together they are multiplying
- for example $2x$ means 2 times x

~~$2x$~~

$2x = 2 \text{ times } x$

$6x$ $18A$

Example:

Evaluate $3x$ When $x = 5$ 15

$$3 \times 5 \text{ or } 3 \cdot 5 \text{ or } (3)(5)$$

Evaluate $2xb$ When $b = 3$ 6Evaluate $5 \cdot a$ When $a = 4$ 20

$$5 \cdot 4$$

Evaluate $12 \div y$ When $y = 6$ 2

$$12 \div 6$$

~~Evaluate $15 \div y$ When $y = 3$~~ Evaluate $\frac{8}{x}$ When $x = 2$ 4

$$\frac{8}{2}$$

Evaluate each expression when $a = 5$, $b = 3$, and $c = 8$

1. $7a$ 35

$$7 \times 5 =$$

2. $22 \cdot b$ 66

$$22 \cdot 3 =$$

3. $35 \div a$ 7

$$35 \div 5$$

4. $c \sqrt{24}$ 3

$$8 \sqrt{24}$$

5. ab 15

$$5 \cdot 3 =$$

6. $\frac{c}{b}$ 2.6

$$\frac{8}{3}$$

Evaluate each expression when $w = 6$, $x = 16$, $y = 63$, and $z = 18$

7. $7x$ 112

$$7(16)$$

8. $(2)(w)$ 12

$$2 \times 6$$

9. $7y$ 441

$$7 \cdot 63$$

10. $30 \div w$ 5

$$30 \div 6 =$$

11. $\frac{y}{9}$ 7

$$63 \div 9 =$$

12. $w \sqrt{30}$ 5

$$6 \sqrt{30}$$

13. $\frac{48}{x}$ 3

$$48 \div 16 =$$

14. wx 96

$$6 \cdot 16 =$$

15. xy 1008

$$16 \cdot 63$$

16. $z \div w$ 3

$$18 \div 6 =$$

17. $y \div x$ 3.93

$$63 \div 16$$