



Grade 9 Warm Up



1) Determine the missing number in each statement.

a) $\underline{15.225} \div 7.25 = 2.1$

$$2.1 \times 7.25 = 15.225$$

b) $\underline{-1.28} \times -0.7 = 0.896$

$$0.896 \div (-0.7)$$

c) $\frac{91}{42} \div \square = \frac{13}{7}$

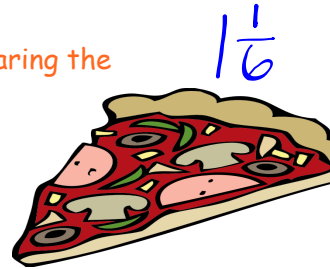
$$\frac{91}{42} \div \frac{13}{7} = \frac{91}{42} \times \frac{7}{13} = \frac{637}{546} = \frac{91}{78}$$

Word Problems



1) A pizza cost \$25.98. If 27 people are sharing the cost, what was the cost for each person?

$$25.98 \div 27 = \$0.96$$



Calculator Use

$$(2)^4 = 2 \times 2 \times 2 \times 2 \\ = 16$$

Use x^y or y^x or $^$ for exponents on calculators

$$(3)^2$$

$$9$$

$$(-3)^2$$

$$9$$

$$(-2)^3$$

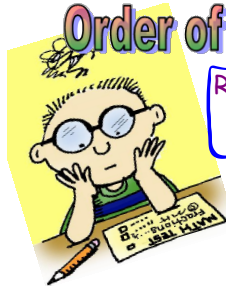
$$-8$$

$$(-2)(-2)(-2)$$

$$-8$$

Section 3.6

Order of Operations with Rational Numbers



Remember from "BEDMAS".....order of operations



In the order that they appear

Recall

Evaluate the following

BEDMAS

$$1) \quad (-5) - 3[18 \div (-3)]^2$$

$$\begin{aligned} & (-5) - 3(-6)^2 \\ & (-5) - 3(36) \\ & (-5) - 108 \\ & -113 \end{aligned}$$

Do we need more practice?

BEDMAS



$$\begin{aligned} 1) \quad & 3 - [(-5) + 1]^3 \\ & 3 - (-4)^3 \\ & 3 - (-64) \\ & 67 \end{aligned}$$

$$\begin{aligned} 2) \quad & [(-3 + 5)^2 + 6(-2) + 7(3)]^2 \\ & [2^2 + 6(-2) + 7(3)]^2 \\ & [4 - 12 + 21]^2 \\ & [13]^2 \\ & 169 \end{aligned}$$

Using the Order of Operations with Decimals

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Evaluate the following:

It is no difference with
decimals....follow **BEDMAS**

BEDMAS

↑↑

With decimals you
may need to round
your final answers

$$1) (-1.3) + 0.8 \div (-0.2) \times 5$$

$$= (-1.3) + (-4) \times 5$$

$$(-1.3) + (-20)$$

$$-21.3$$

$$2) (-3.6) - 1.7 \div [0.6 + (-0.8)]^2$$

$$(-3.6) - 1.7 \div (1.4)^2$$

$$(-3.6) - 1.7 \div 1.96$$

$$(-3.6) - 0.87$$

$$-4.47$$

Fractions

BEDMAS

↑

$$\left(\frac{2}{5}\right)^2 \div \left(\frac{2}{3} + \frac{4}{5}\right)$$

$$\left(\frac{2}{5}\right)^2 \div \frac{22}{15}$$

$$\frac{4}{25} \div \frac{22}{15}$$

$$\frac{4^{\cancel{2}} \times 15^{\cancel{3}}}{25^{\cancel{5}} \times 22^{\cancel{2}}}$$

$$= \frac{60^{\cancel{10}}}{550^{\cancel{10}}} = \frac{6}{55}$$

$$\frac{2}{5} \times \frac{3}{11} = \frac{6}{55}$$

$$\frac{2.5}{3.5} + \frac{4.3}{5.3}$$

$$\frac{10}{15} + \frac{12}{15}$$

$$\frac{22}{15}$$

$$\frac{6}{5} \times \left(\frac{1}{4} + \frac{1}{4}\right)^2 - \frac{3}{20}$$

Homework
question
5 mins left
↳ do it
Now!