

Addition of Negative Numbers

Answer



Positive + Negative

- ★ $8 + (-5) = 3$
- ★ $21 + (-12) = 9$
- ★ $54 + (-92) = -38$
- ★ $200 + (-13) = 187$



Negative + Positive

- ★ $-5 + 5 = 0$
- ★ $-9 + 14 = 5$
- ★ $-150 + 27 = -123$
- ★ $-318 + 155 = -163$



Negative + Negative

- ★ $-3 + (-6) = -9$
- ★ $-57 + (-23) = -80$
- ★ $-110 + (-100) = -210$
- ★ $-8.2 + (-12.8) = -21$



Challenge

★ $-58 + 12 + 231 + (-200)$
 $= -46 + 231 + (-200)$
 $= 185 + (-200)$
 $= -15$

★ $1 - 2 + 3 - 4 + 5 - 6 + 7 - 8 + 9 - 10$

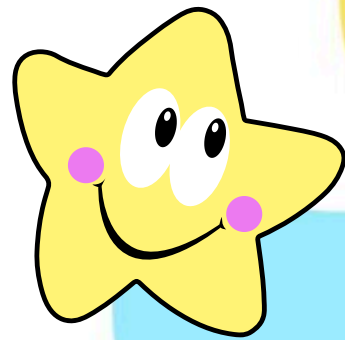
Method 1

$$\begin{aligned} &= -1 + 3 - 4 + 5 - 6 + 7 - 8 + 9 - 10 \\ &= 2 - 4 + 5 - 6 + 7 - 8 + 9 - 10 \\ &= -2 + 5 - 6 + 7 - 8 + 9 - 10 \\ &= 3 - 6 + 7 - 8 + 9 - 10 \\ &= -3 + 7 - 8 + 9 - 10 \\ &= 4 - 8 + 9 - 10 \\ &= -4 + 9 - 10 \\ &= 5 - 10 \\ &= -5 \end{aligned}$$

Method 2

$$\begin{aligned} &= (1-2) + (3-4) + (5-6) + (7-8) + (9-10) \\ &= (-1) + (-1) + (-1) + (-1) + (-1) \\ &= -5 \end{aligned}$$

How many stars
can you get?



Subtraction with Negative Numbers

Answer

Positive - Negative

★ $10 - (-5) = 15$

★ $25 - (-6) = 31$

★ $50 - (-20) = 70$

★ $4.2 - (-1.3) = 5.5$

Negative - Positive

★ $-3 - 2 = -5$

★ $-6 - 4 = -10$

★ $-15 - 9 = -24$

★ $-30 - 25 = -55$

Negative - Negative

★ $-10 - (-5) = -5$

★ $-60 - (-50) = -10$

★ $-110 - (-100) = -10$

★ $-8.2 - (-12.8) = 4.6$

Challenge

★ $-25 - 15 - (-10) + (-8)$
 $= -40 - (-10) + (-8)$
 $= -40 + 10 + (-8)$
 $= -30 + (-8)$
 $= -38$

★ $|-5+8| + |-3-6|$
 $= |3| + |-9|$
 $= 3 + 9$
 $= 12$

打卡小结

PreA会深入学习**负数四则运算**和含**绝对值**的运算，同时拓展**应用**；因此需要小朋友熟练掌握**Math6**里**负数加减乘除的运算法则**，理解绝对值的概念。

(Day2预告：负数乘除，坚持打卡得coins👉)



Multiplication of Negative Numbers

Answer

Positive $\times$ Negative

★ $50 \times (-36) = -1800$

★ $0 \times (-400) = 0$

★ $23 \times (-5.2) = -119.6$

★ $25 \times (-21) = -525$

Negative $\times$ Positive

★ $-5 \times 12 = -60$

★ $-17 \times 4 = -68$

★ $-123 \times 3 = -369$

★ $-1.5 \times 6 = -9$

Negative $\times$ Negative

★ $-5 \times (-6) = 30$

★ $-18 \times (-15) = 270$

★ $-12 \times \left(-\frac{5}{12}\right) = 5$

★ $-2.5 \times (-4.2) = 10.5$

Challenge

★ $-24 \times \left(\frac{1}{3} + \frac{5}{6} + \frac{3}{8}\right)$

$$= -24 \times \frac{(8+20+9)}{24}$$

$$= -37$$

★ $-24 \times \left(\frac{1}{3} + \frac{5}{6} + \frac{3}{8}\right)$

$$= (-24 \times \frac{1}{3}) + (-24 \times \frac{5}{6}) + (-24 \times \frac{3}{8})$$

$$= -8 + (-20) + (-9)$$

$$= -37$$



Division of Negative Numbers

Answer

Positive ÷ Negative

★ $6 \div (-2) = -3$

★ $14 \div (-6) = -\frac{7}{3}$

★ $30 \div (-5) = -6$

★ $120 \div (-10) = -12$

Negative ÷ Positive

★ $-18 \div 5 = -\frac{18}{5}$

★ $-59 \div 7 = -\frac{59}{7}$

★ $-150 \div 50 = -3$

★ $-200 \div 200 = -1$

Negative ÷ Negative

★ $-45 \div (-5) = 9$

★ $-6.6 \div (-1.1) = 6$

★ $-12 \div (-10) = 1.2$

★ $-3 \div (-\frac{3}{16}) = 16$

Challenge

★ $-6 + 2 \div (-3) \times \frac{3}{16}$
 $= -6 + (-\frac{2}{3} \times \frac{3}{16})$
 $= -6 + (-\frac{1}{8})$
 $= -\frac{48}{8} + (-\frac{1}{8}) = -\frac{47}{8}$

打卡小结

通过这两天的打卡，小朋友已经能够理解**Math6**负数运算法则并进行混合运算，能够帮助更加顺利地过渡**PreA**的**有理数**章节学习🐣

(明天打卡预告：分数运算，坚持打卡得 coins)



Mixed Operations with Fractions

Answer

 Calculation of Fractions

$$\star \frac{3}{10} + \frac{11}{25} = \frac{37}{50}$$

$$\star \frac{3}{17} - \frac{3}{7} = -\frac{30}{119}$$

$$\star \frac{15}{16} + \frac{7}{12} = \frac{73}{48}$$

$$\star \frac{5}{8} - \frac{7}{12} = \frac{1}{24}$$

$$\star \frac{13}{21} + \frac{3}{14} = \frac{5}{6}$$

$$\star \frac{25}{32} - \frac{7}{24} = \frac{47}{96}$$

 Mixed Calculation

$$\star \left(-\frac{3}{8}\right) \times \frac{1}{3} \times \frac{2}{5} = -\frac{1}{20}$$

$$\star \left(-\frac{3}{8}\right) + \frac{3}{8} \div \frac{2}{5} = \frac{9}{16}$$

$$\star \frac{11}{21} \times \frac{21}{11} \times \left(-\frac{4}{9}\right) = -\frac{4}{9}$$

$$\star \frac{13}{55} \times \frac{7}{13} \div \left(-\frac{119}{165}\right) = -\frac{3}{17}$$

 Challenge

$$\star \frac{3}{5} \times \frac{5}{3} \div \frac{21}{35} + \frac{1}{21} - \left(-\frac{2}{3}\right)$$

$$= 1 \div \frac{21}{35} + \frac{1}{21} - \left(-\frac{2}{3}\right)$$

$$= \frac{35}{21} + \frac{1}{21} + \frac{2}{3}$$

$$= \frac{35}{21} + \frac{1}{21} + \frac{14}{21}$$

$$= \frac{35+1+14}{21}$$

$$= \frac{50}{21}$$

打卡小结

分数是小学阶段的计算重难点，未来的代数和几何学习离不开分数计算的扎实基础，这两天的打卡将帮助小朋友加深Math6分数**运算法则**的理解并进行**混合运算**，更加顺利地过渡**PreA**的有理数章节内容。

(明天打卡预告：假分数、带分数转换运算，坚持打卡得 coins)



Mixed Operations with Fractions

Answer



Fraction addition

$$\star 3\frac{4}{5} + 2\frac{3}{10} = \frac{61}{10}$$

$$\star \frac{17}{5} + \frac{11}{20} = \frac{79}{20}$$

$$\star 2\frac{1}{8} + 6\frac{1}{5} = \frac{333}{40}$$

$$\star \frac{17}{15} + \frac{151}{150} = \frac{107}{50}$$

$$\star 1\frac{7}{9} + 7\frac{11}{3} = \frac{112}{9}$$

$$\star \frac{13}{3} + \frac{3}{13} = \frac{178}{39}$$



Mixed Calculation

$$\star \frac{5}{3} + 3\frac{1}{7} = \frac{101}{21}$$

$$\star \frac{7}{9} \times \left(-\frac{9}{3}\right) = -\frac{7}{3}$$

$$\star \left(-\frac{13}{11}\right) \times \frac{9}{10} = -\frac{117}{110}$$

$$\star 2\frac{1}{9} \div \left(-\frac{7}{3}\right) = -\frac{19}{21}$$



Challenge

$\star$ A man had $4\frac{2}{5}$ pounds of potatoes. If $\frac{2}{3}$ pounds of potatoes were used for cooking, how many pounds of potatoes are left?

$$4\frac{2}{5} - \frac{2}{3}$$

$$= \frac{(4 \times 5) + 2}{5} - \frac{2}{3}$$

$$= \frac{22}{5} - \frac{2}{3}$$

$$= \frac{(22 \times 3) - (2 \times 5)}{15} = \frac{56}{15}$$

打卡小结

通过这两天的打卡练习，孩子们对**分数四则运算**以及**带分数、假分数**的互化有了更扎实的理解和运用，**应用**解题时的规范表达也在稳步提升👏下周我们将继续**指数计算**模块，逐步过渡到**变量参与的表达与运算**，为代数学习打下更坚实的基础💪

