

November 10, 2014^{1st}_{2nd}

Starter

If 3 green chips have the same value as 5 blue chips,
2 red chips have the same value as 1 yellow chip,
and 4 red chips have the same value as 3 green chips,
how many blue chips can you get for 8 yellow chips?



Gypsy

Homework from last week:

$$\begin{aligned} & \left(-2\frac{2}{3}\right)^2 - \frac{3}{5} \\ &= \left(-\frac{8}{3}\right)^2 - \frac{3}{5} \\ &= \frac{64}{9} - \frac{3}{5} \\ &= 6\frac{23}{45} \end{aligned}$$

$$\begin{array}{r} 6 \quad 50 \\ + \cancel{1} \frac{13}{90} \frac{5}{45} \\ - \frac{39}{59} \frac{27}{45} \\ \hline 6 \frac{23}{45} \end{array}$$

To do “evaluate” problems:

- 1. Write the problem.**
- 2. Rewrite, substituting values.**
- 3. Work problem step by step.**
- 4. Circle the answer.**

$$a = -\frac{2}{3} \quad b = \frac{1}{4} \quad c = 2\frac{1}{2} \quad d = -1\frac{1}{6}$$

$$\begin{aligned} a + b \\ = -\frac{2}{3} + \frac{1}{4} \\ = -\frac{5}{12} \end{aligned}$$

$$\begin{array}{r} -\frac{2}{3} \quad -\frac{8}{12} \\ \frac{1}{4} \quad \frac{3}{12} \\ \hline -\frac{5}{12} \end{array}$$

$$\begin{aligned} c + a \\ = 2\frac{1}{2} + -\frac{2}{3} \\ = 1\frac{5}{6} \end{aligned}$$
$$\begin{array}{r} 1\frac{1}{2} \quad \frac{9}{6} \\ \cancel{2} \frac{1}{2} \quad \cancel{3} \\ -\frac{2}{3} \quad \frac{4}{6} \\ \hline 1\frac{5}{6} \end{array}$$

$$a = -\frac{2}{3} \quad b = \frac{1}{4} \quad c = 2\frac{1}{2} \quad d = -1\frac{1}{6}$$

$$\begin{aligned} & a^2 - d \\ &= \left(-\frac{2}{3}\right)^2 + \left(+\frac{1}{6}\right) \quad \frac{-2}{3} \cdot \frac{-2}{3} \\ &= \frac{4}{9} + 1\frac{1}{6} \quad + \frac{1}{6} \frac{3}{18} \\ &= 1\frac{11}{18} \quad + \frac{4}{9} \frac{8}{18} \\ & \quad \quad \quad \frac{11}{18} \end{aligned}$$

$$a = -\frac{2}{3} \quad b = \frac{1}{4} \quad c = 2\frac{1}{2} \quad d = -1\frac{1}{6}$$

$$\begin{aligned}
 & (b-c)^2 \\
 &= \left(\frac{1}{4} + 2\frac{1}{2}\right)^2 \\
 &= \left(-2\frac{1}{4}\right)^2 \\
 &= \frac{81}{16} \\
 &= 5\frac{1}{16}
 \end{aligned}$$

$$\begin{aligned}
 & -2\frac{1}{2} \cdot \frac{2}{4} \\
 & + \frac{1}{4} \cdot \frac{1}{4} \\
 \hline
 & -2\frac{1}{4} \\
 & -2\frac{1}{4} \cdot -2\frac{1}{4} \\
 & = -\frac{9}{4} \cdot -\frac{9}{4} \\
 & = \frac{81}{16}
 \end{aligned}$$

$$\begin{aligned}
 & 2d + 3b \\
 &= 2 \cdot -1\frac{1}{6} + 3 \cdot \frac{1}{4} \\
 &= -2\frac{1}{3} + \frac{3}{4} \\
 &= -1\frac{7}{12}
 \end{aligned}$$

$$\begin{aligned}
 & \frac{1}{3} \cdot \frac{1}{3} = \frac{1}{3} \\
 & \frac{3}{1} \cdot \frac{1}{4} = \frac{3}{4} \\
 & -2\frac{1}{3} \cdot \frac{4}{12} \\
 & + \frac{3}{4} \cdot \frac{9}{12} \\
 \hline
 & -1\frac{7}{12}
 \end{aligned}$$

Homework

Green WS 10

Due ^{End of class}
Tuesday