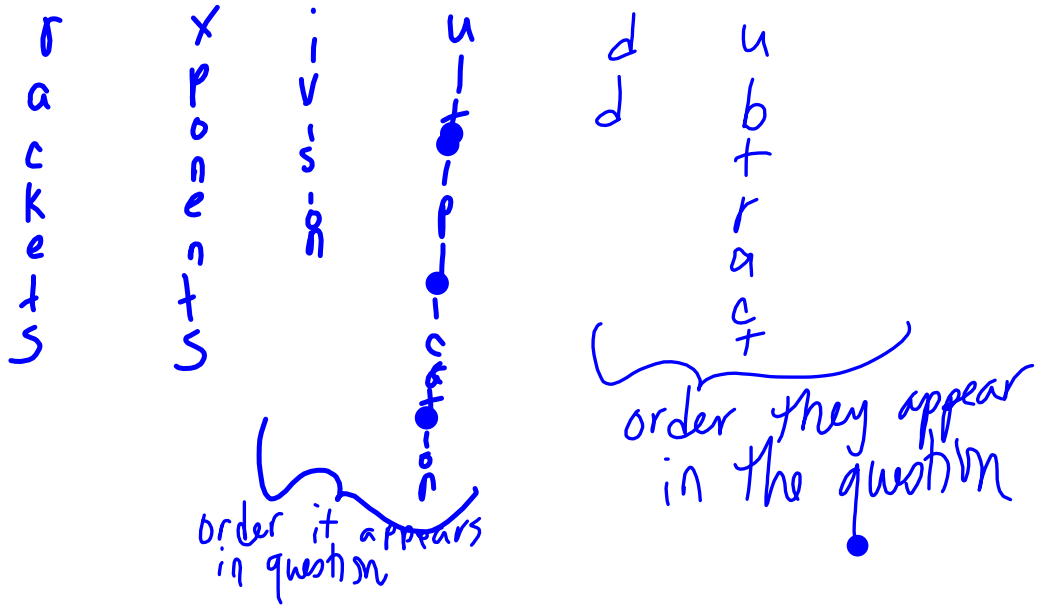
Section 3.6 September 24

Orders of Operations

BEDMAS



$$-\left|\frac{1}{6}-\frac{1}{2}+\left|\frac{3}{8}\right.\right.$$

BEDMAS

$\times^4$ $\times^{12}$ $\times^3$

$$\frac{-7}{6}-\frac{1}{2}+\frac{11}{8}$$

$\times^4$ $\times^{12}$ $\times^3$

$$\frac{-28}{24}+\frac{-12}{24}+\frac{33}{24}$$

$$\frac{-7}{24}$$

Orders of Operation

BEDMAS

1. $3 \times 2 + 9$

$6 + 9$

15

2. $7 \times 6 + 4 \times 2$

$42 + 4 \times 2$

$42 + 8$

50

BEDMAS

3. $8 \div 2 \times 9$

4×9

36

4. $24 - 7 \times 2$

$24 - 14$

10

BEDMAS (-6) 42 ÷ (6 - 3)

5. $36 \div 9 + 7$

$4 + 7$

11

6. $42 \div (6 - 3)$

$42 \div 3$

14

BEDMAS

7. (4 + 3 x 2) - 10

$(4+6)-10$

$(10)-10$

0

8. (10 - 2 x 2) x 3

$(10-4)\times 3$

6×3

18

9. $\dfrac{4 \times 2 + 3 \times 6}{2 \times 7 - 1}$

$\dfrac{8 + 3 \times 6}{14 - 1}$

$\dfrac{8 + 18}{13}$

$\frac{26}{13} = 2$

10. $\dfrac{27 \div 3 + 1}{2 \times 2 + 1}$

$\dfrac{9 + 1}{4 + 1}$

$\frac{10}{5}$

2

BEDMAS

11. $(-3)-2\times 8+8$

$-3-2\times 8+8$

$-3-16+8$

$-19+8$

-11

Orders of Operations with decimals...

BEDMAS

12. $(-0.8) + 1.2 \div (-0.3) \times 1.5$

$-0.8 + -4 \times 1.5$

$-0.8 - 6$

-6.8

B. $(-3.2) - 0.9 \div [0.7 - (-1.2)]$

BEDMAS

$$-3\frac{2}{5}\times-1\frac{5}{6}+\frac{3}{10}$$

$$-\frac{17}{5}\times\frac{-11}{6}+\frac{3}{10}$$

$$\frac{187}{30}+\frac{3}{10}\times\frac{3}{3}$$

$$\frac{187}{30}+\frac{9}{30}=\frac{196}{30}=6\frac{16}{30}=6\frac{8}{15}$$

BEDMAS

$-3\frac{1}{2} \times 2\frac{1}{6} \div -1\frac{1}{5}$

$-\frac{7}{2} \times \frac{13}{6} \div -\frac{6}{5}$

$-\frac{91}{12} \div -\frac{6}{5}$

$-\frac{91}{12} \times -\frac{5}{6}$

$\frac{455}{72}$

$6\frac{23}{72}$

BEDMAS

$$\left(\frac{3}{7}\overset{\times 3}{\underset{\times 3}{}} + \frac{11}{21}\right) \div \frac{5}{12} \times \frac{-2}{3}$$

$$\left(\frac{9}{21} + \frac{11}{21}\right) \div \frac{5}{12} \times \frac{-2}{3}$$

$$\frac{20}{21} \div \frac{5}{12} \times \frac{-2}{3}$$

$$\frac{20}{21} \times \frac{12}{5} \times \frac{-2}{3}$$

$$\frac{240}{105} \times \frac{-2}{3}$$

$$\frac{-480}{315} = -1\frac{11}{21}$$

$$\frac{-480}{315}$$

$$-1\frac{165}{315}$$

$$-1\frac{11}{21}$$

$\left(\frac{1}{2}\right)\left(\frac{1}{2}\right)$

$\left(\frac{1}{2}\right) \times \left(\frac{1}{2}\right)$ $\frac{1}{2} \times \frac{1}{2}$

Classwork

Page 140 4 a, b, c

Worksheet...**DO NOT MARK ON SHEET!**

QUESTIONS 1-10!!!

Page 140
#1-5 worksheet

$$-\frac{5}{4} \div \left(-\frac{1}{4}+\frac{3^{x^2}}{2^{x^2}}\right)\left(-\frac{1}{4}+\frac{3^{x^2}}{2^{x^2}}\right)$$

$$-\frac{5}{4} \div \left(-\frac{1}{4}+\frac{6}{4}\right)\left(-\frac{1}{4}+\frac{6}{4}\right)$$

$$-\frac{5}{4} \div \frac{5}{4} \times \frac{5}{4}$$

$$-\frac{5}{4} \times \frac{4}{5} \times \frac{5}{4}$$