# WELCOME TO MBF3C!

## UNIT 0 - REVIEW
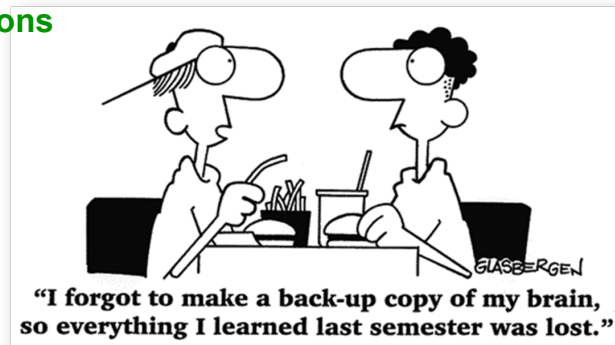
**Learning Goals:**
- **Introductions**
- **Understand Course Expectations**
- **Review Procedures**
- **Think Mathematically Again**



"I forgot to make a back-up copy of my brain, so everything I learned last semester was lost."

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# EXPECTATIONS

**Mistakes are great learning opportunities. Be generous and share yours.**

**What you already think and know matters.**

**Be respectful of**
**yourself,**
**the teacher,**
**your classmates,**
**and the environment**

**Be Positive and Helpful.**
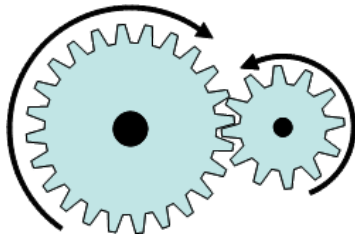
**Be prepared and on-time for every class.**

**Use class time effectively.  Ask questions to clarify concepts.**

**Rule**

NO PARKING
UNAUTHORIZED
VEHICLES WILL BE
**TOWED AWAY**
AT VEHICLE
OWNERS EXPENSE

**Consequence**

**Procedures**

1. Seating is determined by cards randomly each Monday.
2. Work on Warm - up questions at the beginning of class.
3. Lesson or group activity.
4. Board work.
5. Start homework if time left after board work.

## On the Boards...

What did you learn...

in grade 9

**percent**

**integers**

**graph**
   **slope**
   **y-int**

**solving equations**

**Pythagorean Theorem**

in grade 10 ?

**similar triangles**
   **trigonometry**

**solving linear systems**

**quadratics**
   **factoring**
   **vertex**
   **zeros**

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What do you remember from grade 10?

Evaluate:

   2+3(5)

$$= 2 + 15$$
$$= 17$$

   3(2)+4(7)

$$= 6 + 28$$
$$= 34$$

Steps:
1. Decide the $\underline{\text{order}}$
2. Do them $\underline{\text{one}}$ at a time.
3. Use a $\underline{\text{calculator}}$
      NOT your phone.

✳

$$+ \; + \longrightarrow +$$
$$- \; - \longrightarrow +$$
$$+ \; - \longrightarrow -$$
$$- \; + \longrightarrow -$$

## On the Boards...

$3(2+7)-4$

$$= 3(9) - 4$$
$$= 27 - 4$$
$$= 23$$

$3(2+7)^2 -4$

$$= 3(9)^2 - 4$$
$$= 3(81) - 4$$
$$= 243 - 4$$
$$= 239$$

$-2(-5)+14 \div (-7)$

$$= 10 + (-2)$$
$$= 10 - 2$$
$$= 8$$

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## FRACTIONS

**Add / Subtract**
- _common_ denominator
- **adjust the top numbers by multiplying**
- **add or subtract the** _top_ **numbers**
- **keep the bottom the** _same_

$$\frac{2}{3} + \frac{7}{3}$$
$$= \frac{2+7}{3}$$
$$= \frac{9}{3}$$
$$= 3$$

$\times 5 \left( \frac{1}{3} + \frac{1}{5} \right) \times 3$
$$\times 5 \left( = \frac{5+3}{15} \right) \times 3$$
$$= \frac{8}{15}$$

$$\frac{1}{3} + \frac{1}{6}$$
$$= \frac{2+1}{6}$$
$$= \frac{3}{6}$$
$$= \frac{1}{2}$$

## FRACTIONS

**Multiply** - top with <u>top</u>
                  - bottom with <u>bottom</u>

$$\frac{2}{3}\left(\frac{3}{4}\right)$$

$$= \frac{6}{12}$$

$$= \frac{1}{2}$$

## FRACTIONS

**Divide**    - keep first
            - change to <u>multiplication</u>
            - second is <u>flipped</u>
            - multiply

$$\frac{2}{3} \div \frac{1}{5}$$

$$= \frac{2}{3} \times \frac{5}{1}$$

$$= \frac{10}{3}$$

## FRACTIONS

**Reduce** - <u>always</u> $\Rightarrow$ divide top and bottom by the same number

$$\frac{10}{12} \qquad\qquad \frac{27}{81}$$

$$= \frac{5}{6} \quad \div 2 \qquad = \frac{9}{27} \quad \div 3$$

$$= \frac{3}{9} \quad \div 3$$

$$= \frac{1}{3} \quad \div 3$$

## On the Boards...

$$\frac{2}{3} + \frac{4}{5} \qquad\qquad \frac{2}{3}\left(\frac{7}{8}\right) \qquad\qquad \left(\frac{3}{2}\right)^2$$

$$= \frac{10 + 12}{15} \qquad = \frac{14}{24} \qquad = \frac{9}{4}$$

$$= \frac{22}{15} \qquad\qquad = \frac{7}{12}$$

$$\frac{3^2}{2} \qquad \frac{3}{4} \div \frac{8}{9} \qquad \frac{1}{2} + \frac{3}{4}\left(\frac{2}{5}\right)$$

$$= \frac{9}{2} \qquad = \frac{3}{4} \times \frac{9}{8} \qquad = \frac{1}{2} + \frac{6}{20}$$

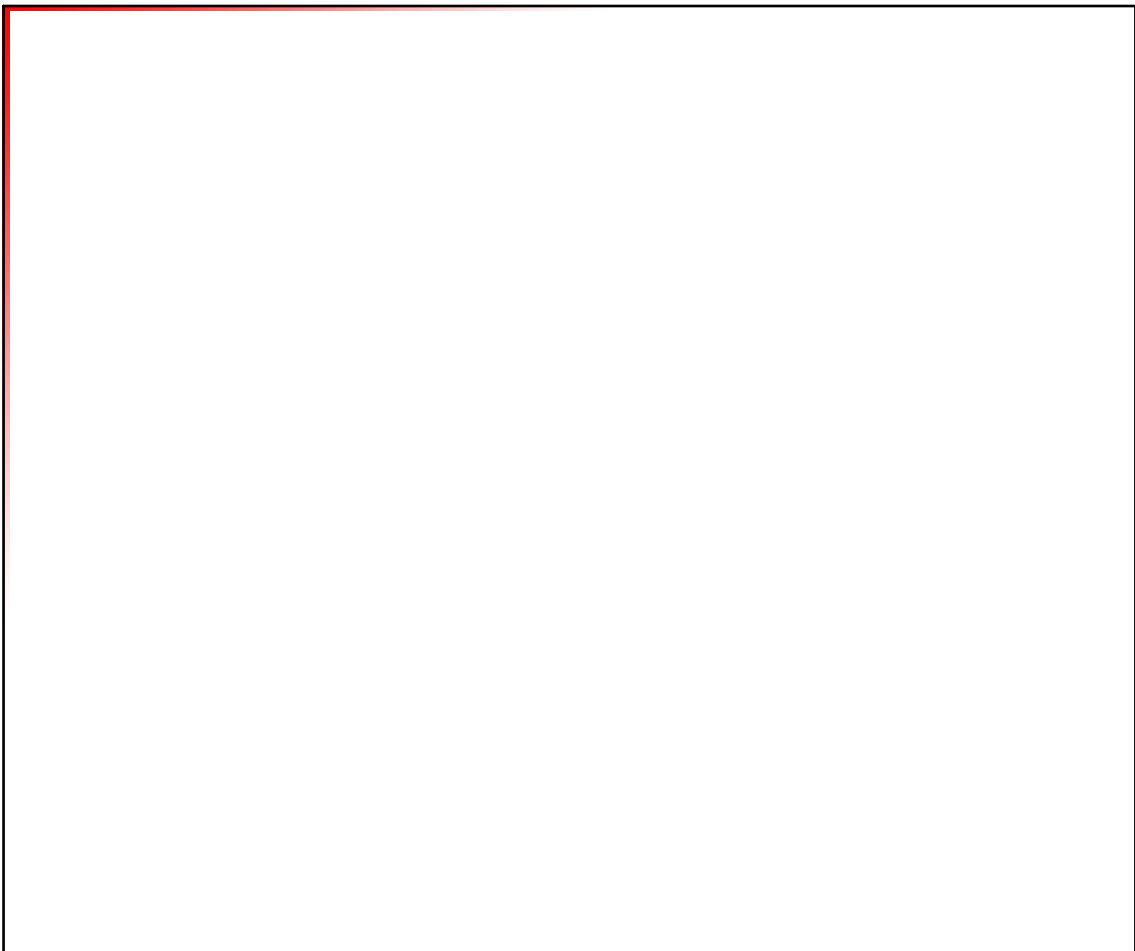$$\qquad\qquad = \frac{27}{32} \qquad = \frac{10 + 6}{20}$$

$$= \frac{16}{20}$$

$$= \frac{4}{5}$$

**Homework**

**Fraction Handout**

**BEDMAS Handout - even**

# Attachments

Mr. Atkinson's Discipline Plan.docx

Mr. Atkinson's Classroom Procedures.docx

Course Outline - 3C.pdf

CourseOutlineMBF3CHSJune2014.docx

scan0003.pdf

scan0004.pdf