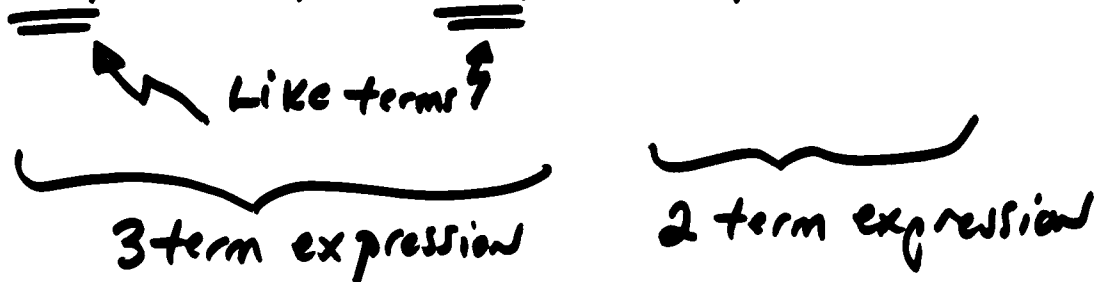


BE-1A THURSDAY 9-6-07

RECALL: like terms = SAME variable(s),
variables have SAME exponents

Ex) $\underline{3xy} + 4xyz + \underline{2xy} = 5xy + 4xyz$


Like terms
3 term expression 2 term expression

An expression is in simplest terms when all like terms have been combined & parentheses gone.

COPY ABOVE FOR NOTES

Simplify:

① $14x + 12x - 6$

② $3(2x + 5) + 5x - 2$

③ $2x + 3x^2 + 4x - x^2$

1.
EVEN THOUGH the DP is NOT REQUIRED
if the terms in parentheses ARE "like"
terms - you may WANT TO use it to
MAKE SOME CALCULATIONS EASIER.

Ex) Use DP to find $6 \cdot 74$

$$\begin{aligned} 6 \cdot 74 &= 6(70 + 4) \\ &= 420 + 24 = \boxed{444} \end{aligned}$$

Ex) Use DP to find $6(5\frac{1}{6})$

$$6(5\frac{1}{6}) = 6(5 + \frac{1}{6})$$

$$= 30 + 6 \cdot \frac{1}{6}$$

$$= 30 + \frac{6}{1} \cdot \frac{1}{6}$$

$$= 30 + 1$$

$$= \boxed{31}$$

Reciprocal Property

Tip 💡 Use THE COMMUTATIVE & ASSOCIATIVE PROPERTIES TO REORDER OR TO "re-group" multiplication or addition to MAKE A problem EASIER TO SOLVE.

$$\begin{aligned}
 \text{Ex)} \quad & 12 + 10 + 8 + 5 \\
 & = 12 + 8 + 10 + 5 \\
 & = \begin{array}{c} \diagdown \diagup \\ 20 \end{array} + 10 + 5 \\
 & \quad \quad \quad \diagdown \diagup \\
 & \quad \quad \quad 30 + 5 = \boxed{35}
 \end{aligned}$$

$$\begin{aligned}
 \text{Ex)} \quad & 10 \cdot 7 \cdot 2.5 \\
 & = (10 \cdot 2.5) \cdot 7 \\
 & = 25 \cdot 7 = 7 \overbrace{(20 + 5)} \\
 & \quad \quad \quad = 140 + 35 = \boxed{175}
 \end{aligned}$$

$$\begin{aligned}
 \text{Ex)} \quad & 18 \cdot 8 \cdot \frac{1}{2} \cdot \frac{1}{4} \\
 & = (18 \cdot \frac{1}{4}) \cdot (8 \cdot \frac{1}{2}) = 2 \cdot 4 = \boxed{8}
 \end{aligned}$$

- WORKSHEET 1-6.
- Graded individual work.
- Open book, open notes.

All work on looseleaf - neat & organized.
