

Section 1.5: cont'd

Tuesday, October 01, 2013
8:31 AM

③ $a(b+c) = (b+c) \cdot a$ T

④ $\frac{z+3}{z+5} = \frac{3}{5}$ F

note: $\frac{6x+9}{3} = \frac{3(2x+3)}{3} = \frac{3}{3} (2x+3)$
 $= 1 (2x+3)$
 $= 2x+3$

⑤ $2(xy) = (2x)(2y)$ F

⑥ $3x^2yz \cdot 0 = 3x^2yz$ F

⑦ $(a-b) + c = a - (b+c)$ F
 $a - b + c \quad \stackrel{?}{=} \quad a - b - c$

⑧ $y \div \frac{1}{y} = 1$ F
 $\underbrace{\hspace{2cm}}$
 $y \cdot \frac{y}{1}$

⑨ T

10

$$(a+b)^2 = a^2 + b^2$$

F

"bad" distribution:

$$\sqrt{x+y} \neq \sqrt{x} + \sqrt{y}$$

$$(x+y)^2 \neq x^2 + y^2$$

$$\frac{1}{x+y} \neq \frac{1}{x} + \frac{1}{y}$$

note:

$a-b$

← sometimes we want to pull out a negative sign

$$\begin{aligned} a-b &= -(-a+b) \\ &= -(b-a) \end{aligned}$$

$$2-x = -(x-2)$$