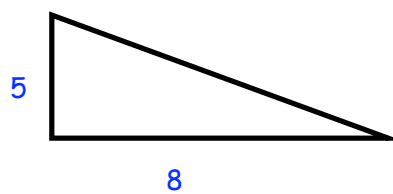


$$A_{\Delta} = \frac{1}{2} \cdot 5 \cdot 8$$

Chapter 9.5

Associative Property of Multiplication

$$A_{\Delta} = \frac{1}{2} \cdot \underline{8 \cdot 5}$$



Associative Property of Addition

$$12 + (7+2) \quad \text{and} \quad (12+7)+2$$

$$(56 + 45) + 55$$
$$56 + (45 + 55)$$

$$36 \div (6 \div 2) \quad \text{and} \quad (36 \div 6) \div 2$$

$$12 - (7-2) \quad \text{and} \quad (12-7)-2$$

Commutative Property of Addition

$$a+b = b+a$$

Commutative Property of Multiplication

$$a \cdot b = b \cdot a$$

$$6 \cdot 2 = 2 \cdot 6$$

$$6 \div 2 \neq 2 \div 6$$

$$\frac{6}{2} \quad \frac{2}{6}$$

## Zero Product Property

$$x(y) = 0$$

either  $x$  or  $y$  or both are zero

$$x(x-2)=0$$

$x=0$

$$x-2=0$$

$+2 \quad +2$

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$$x=2$$

$$x(5-9) = 0$$

$$\underline{(x-3)(x+4)=0}$$

$$x-3=0 \quad x+4=0$$

$x=3 \quad x=-4$

$$22a) \quad 2x(3x-1) = 0$$

$$\frac{2x}{2} = \frac{0}{2} \quad ; \quad \begin{array}{r} 3x-1=0 \\ +1 \quad +1 \\ \hline 3x = 1 \\ \frac{3x}{3} = \frac{1}{3} \\ x = \frac{1}{3} \end{array}$$

$$22b) (3x-4)(2x+7)=0$$

$$3x-4=0; 2x+7=0$$

⋮                      ⋮