

Section 1.5: Properties of the Real Numbers

Monday, September 30, 2013

10:12 AM

$$1. \quad a + (-a) = -a + a = 0$$

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$$2. \quad a \div (c+2) = a \div c + a \div 2$$

$$\frac{a}{c+2} = \frac{a}{c} + \frac{a}{2}$$

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note: let $c=1$ and $a=5$

$$\frac{5}{3} = 5 + \frac{5}{2}$$

note:

$$\begin{aligned} (x+6) \div 3 &= (x+6) \cdot \left(\frac{1}{3}\right) \\ &= \frac{1}{3}(x+6) \\ &= \frac{x}{3} + \frac{6}{3} = \frac{x}{3} + 2 \end{aligned}$$

$$\begin{aligned} 3(x-5) &= 3(x + (-5)) \\ &= 3x + 3(-5) \\ &= 3x - 15 \end{aligned}$$